

=> ....Testing the current file.... screen

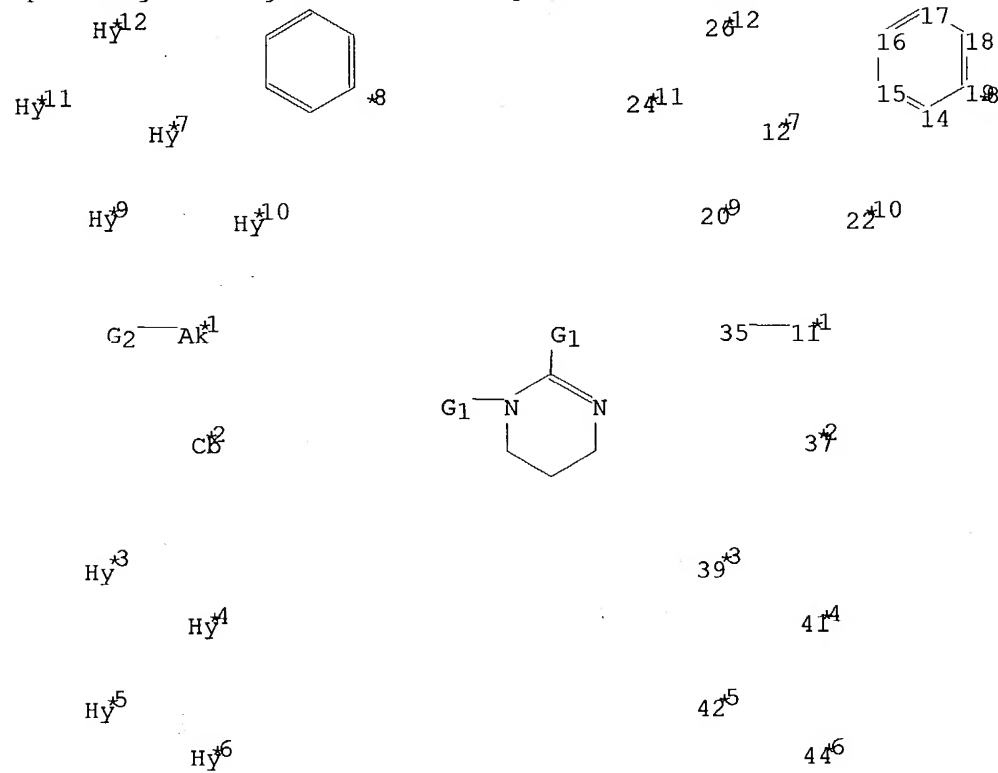
ENTER SCREEN EXPRESSION OR (END):end

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L1 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10009477 (rce 2).str



chain nodes :  
 8 9 11 12 20 22 24 26 35 37 39 41 42 44  
 ring nodes :  
 1 2 3 4 5 6 14 15 16 17 18 19  
 chain bonds :  
 3-9 4-8 11-35  
 ring bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6 14-15 14-19 15-16 16-17 17-18 18-19  
 exact/norm bonds :  
 1-2 1-6 2-3 3-4 3-9 4-5 4-8 5-6 11-35  
 normalized bonds :  
 14-15 14-19 15-16 16-17 17-18 18-19  
 isolated ring systems :  
 containing 1 : 14 :

G1:H,CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,[\*1],[\*2],[\*3],[\*4],[\*5],[\*6]

G2:[\*7],[\*8],[\*9],[\*10],[\*11],[\*12]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 8:CLASS 9:CLASS 11:CLASS 12:Atom  
 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 22:Atom 24:Atom  
 26:Atom 35:CLASS 37:Atom 39:Atom 41:Atom 42:Atom 44:Atom

Generic attributes :

11:

Saturation : Saturated  
 Number of Carbon Atoms : less than 7

12:

Saturation : Unsaturated  
 Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : 2 or more  
 Type of Ring System : Monocyclic

20:

Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Monocyclic

22:

Saturation : Unsaturated  
 Number of Carbon Atoms : 7 or more  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Polycyclic

24:

Saturation : Unsaturated  
 Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Monocyclic

26:

Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : 2 or more  
 Type of Ring System : Monocyclic

37:

Saturation : Unsaturated  
 39:

Saturation : Unsaturated  
 Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Monocyclic

41:  
Saturation : Unsaturated  
Number of Carbon Atoms : 7 or more  
Number of Hetero Atoms : less than 2  
Type of Ring System : Polycyclic  
42:  
Number of Carbon Atoms : less than 7  
Type of Ring System : Monocyclic  
44:  
Saturation : Unsaturated  
Number of Carbon Atoms : less than 7  
Number of Hetero Atoms : 2 or more  
Type of Ring System : Monocyclic

Element Count :  
Node 11: Limited  
C,C1-4

Node 12: Limited  
C,C4  
N,N2  
O,O0  
S,S0

Node 20: Limited  
C,C4  
O,O1  
N,N0  
S,S0

Node 22: Limited  
C,C9  
N,N1  
O,O0  
S,S0

Node 24: Limited  
C,C4  
S,S1  
O,O0  
N,N0

Node 26: Limited  
C,C3  
O,O1  
N,N1  
S,S0

Node 39: Limited  
C,C4-5  
O,O0-1  
S,S0-1  
N,N0

Node 41: Limited  
N,N1-2  
C,C7-9  
O,O0

S,S0

Node 42: Limited  
C,C3-4  
N,N1-2  
O,O0  
S,S0

Node 44: Limited  
C,C3  
N,N1  
O,O0-1  
S,S0-1

L2 STRUCTURE UPLOADED

=> que L2 NOT L1

L3 QUE L2 NOT L1

=> d 13

L3 HAS NO ANSWERS

L1 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047  
L2 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

L3 QUE L2 NOT L1

=> s 13 sss sam

SAMPLE SEARCH INITIATED 15:30:25 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 60438 TO ITERATE

1.7% PROCESSED 1000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

31 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*  
BATCH \*\*INCOMPLETE\*\*  
PROJECTED ITERATIONS: EXCEEDS 1000000  
PROJECTED ANSWERS: EXCEEDS 34875

L4 31 SEA SSS SAM L2 NOT L1

=> => ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

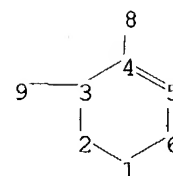
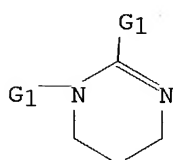
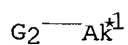
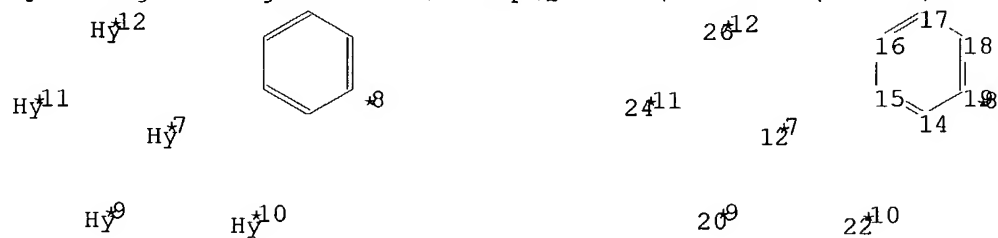
=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2046 OR 2047



L5 SCREEN CREATED

 $\Rightarrow$ 

Uploading C:\Program Files\Stnexp\Queries\10009477 (rce 2a).str



chain nodes :

8 9 11 12 20 22 24 26 35 37 39 41 42 44

```
ring nodes :
```

1 2 3 4 5 6 14 15 16 17 18 19

chain bonds :

3-9 4-8 11-35

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 14-15 14-19 15-16 16-17 17-18 18-19  
 exact/norm bonds :  
 3-9 4-8 11-35  
 exact bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6  
 normalized bonds :  
 14-15 14-19 15-16 16-17 17-18 18-19  
 isolated ring systems :  
 containing 1 : 14 :

G1:H,CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,[\*1],[\*2],[\*3],[\*4],[\*5],[\*6]

G2:[\*7],[\*8],[\*9],[\*10],[\*11],[\*12]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 8:CLASS 9:CLASS 11:CLASS 12:Atom  
 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 22:Atom 24:Atom  
 26:Atom 35:CLASS 37:Atom 39:Atom 41:Atom 42:Atom 44:Atom

Generic attributes :

11:

Saturation : Saturated  
 Number of Carbon Atoms : less than 7

12:

Saturation : Unsaturated  
 Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : 2 or more  
 Type of Ring System : Monocyclic

20:

Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Monocyclic

22:

Saturation : Unsaturated  
 Number of Carbon Atoms : 7 or more  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Polycyclic

24:

Saturation : Unsaturated  
 Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Monocyclic

26:

Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : 2 or more  
 Type of Ring System : Monocyclic

37:

Saturation : Unsaturated  
 39:

Saturation : Unsaturated  
 Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Monocyclic

41:

Saturation : Unsaturated  
 Number of Carbon Atoms : 7 or more  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Polycyclic

42:

Number of Carbon Atoms : less than 7

Type of Ring System : Monocyclic

44:

Saturation : Unsaturated

Number of Carbon Atoms : less than 7

Number of Hetero Atoms : 2 or more

Type of Ring System : Monocyclic

Element Count :

Node 11: Limited

C,C1-4

Node 12: Limited

C,C4

N,N2

O,O0

S,S0

Node 20: Limited

C,C4

O,O1

N,N0

S,S0

Node 22: Limited

C,C9

N,N1

O,O0

S,S0

Node 24: Limited

C,C4

S,S1

O,O0

N,N0

Node 26: Limited

C,C3

O,O1

N,N1

S,S0

Node 39: Limited

C,C4-5

O,O0-1

S,S0-1

N,N0

Node 41: Limited

N,N1-2

C,C7-9

O,O0

S,S0

Node 42: Limited

C,C3-4

N,N1-2

O,00  
S,S0

Node 44: Limited  
C,C3  
N,N1  
O,00-1  
S,S0-1

L6 STRUCTURE UPLOADED

=> que L6 NOT L5

L7 QUE L6 NOT L5

=> d 17

L7 HAS NO ANSWERS

L5 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2046 OR 2047

L6 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

L7 QUE L6 NOT L5

=> s 17 sss sam

SAMPLE SEARCH INITIATED 15:32:44 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 10159 TO ITERATE

9.8% PROCESSED 1000 ITERATIONS

4 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 197141 TO 209219

PROJECTED ANSWERS: 430 TO 1194

L8 4 SEA SSS SAM L6 NOT L5

=> => ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 2016 OR 2026 OR 1841 OR 2039 OR 2040 OR 2045 OR 2047

L9 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10009477 (RCE 2b).str



exact bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6  
 normalized bonds :  
 14-15 14-19 15-16 16-17 17-18 18-19  
 isolated ring systems :  
 containing 1 : 14 :

G1:H,CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,[\*1],[\*2],[\*3],[\*4],[\*5],[\*6]

G2:[\*7],[\*8],[\*9],[\*10],[\*11],[\*12]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 8:CLASS 9:CLASS 11:CLASS 12:Atom  
 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 22:Atom 24:Atom  
 26:Atom 35:CLASS 37:Atom 39:Atom 41:Atom 42:Atom 44:Atom

Generic attributes :

11:

Saturation : Saturated  
 Number of Carbon Atoms : less than 7

12:

Saturation : Unsaturated  
 Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : 2 or more  
 Type of Ring System : Monocyclic

20:

Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Monocyclic

22:

Saturation : Unsaturated  
 Number of Carbon Atoms : 7 or more  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Polycyclic

24:

Saturation : Unsaturated  
 Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Monocyclic

26:

Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : 2 or more  
 Type of Ring System : Monocyclic

37:

Saturation : Unsaturated  
 39:

Saturation : Unsaturated  
 Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Monocyclic

41:

Saturation : Unsaturated  
 Number of Carbon Atoms : 7 or more  
 Number of Hetero Atoms : less than 2  
 Type of Ring System : Polycyclic

42:

Number of Carbon Atoms : less than 7  
 Type of Ring System : Monocyclic

44:  
Saturation : Unsaturated  
Number of Carbon Atoms : less than 7  
Number of Hetero Atoms : 2 or more  
Type of Ring System : Monocyclic

Element Count :  
Node 11: Limited  
C,C1-4

Node 12: Limited  
C,C4  
N,N2  
O,O0  
S,S0

Node 20: Limited  
C,C4  
O,O1  
N,N0  
S,S0

Node 22: Limited  
C,C9  
N,N1  
O,O0  
S,S0

Node 24: Limited  
C,C4  
S,S1  
O,O0  
N,N0

Node 26: Limited  
C,C3  
O,O1  
N,N1  
S,S0

Node 39: Limited  
C,C4-5  
O,O0-1  
S,S0-1  
N,N0

Node 41: Limited  
N,N1-2  
C,C7-9  
O,O0  
S,S0

Node 42: Limited  
C,C3-4  
N,N1-2  
O,O0  
S,S0

Node 44: Limited

C,C3  
N,N1  
O,00-1  
S,S0-1

L10 STRUCTURE UPLOADED

=> que L10 NOT L9

L11 QUE L10 NOT L9

=> d l11

L11 HAS NO ANSWERS

L9 SCR 2016 OR 2026 OR 1841 OR 2039 OR 2040 OR 2045 OR 2047

L10 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

L11 QUE L10 NOT L9

=> s l11 sss sam

SAMPLE SEARCH INITIATED 15:35:19 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 2787 TO ITERATE

35.9% PROCESSED 1000 ITERATIONS

7 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 52574 TO 58906

PROJECTED ANSWERS: 125 TO 655

L12 7 SEA SSS SAM L10 NOT L9

=> => s l11 sss ful

FULL SEARCH INITIATED 15:39:06 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 54749 TO ITERATE

100.0% PROCESSED 54749 ITERATIONS

346 ANSWERS

SEARCH TIME: 00.00.02

L13 346 SEA SSS FUL L10 NOT L9

=>

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C \*2

8 \*2

N \*3

9 \*3

G1 — G2

5 — 6

$$\begin{array}{c} \text{O} \\ || \\ *1 \end{array}$$

$$\begin{array}{c} 2 \\ || \\ 1 *1 \end{array}$$

chain nodes :

1 2 5 6

ring/chain nodes :

8 9

chain bonds :

1-2 5-6

exact/norm bonds :

1-2 5-6

G1:NO2,[\*1]

G2:[\*2],[\*3]

Match level :

1:CLASS 2:CLASS 5:CLASS 6:CLASS 8:CLASS 9:CLASS

L14 STRUCTURE UPLOADED

=&gt; d l14

L14 HAS NO ANSWERS

L14 STR

2

N 3

G1 — G2

 O  
 ||  
 1

G1 NO2, [01]  
 G2 [02], [03]

Structure attributes must be viewed using STN Express query preparation.

=> s l14 sub=l13 sss sam  
 SAMPLE SUBSET SEARCH INITIATED 15:44:44 FILE 'REGISTRY'  
 SAMPLE SUBSET SCREEN SEARCH COMPLETED - 10 TO ITERATE

100.0% PROCESSED 10 ITERATIONS 5 ANSWERS  
 SEARCH TIME: 00.00.01

PROJECTIONS (WITHIN SPECIFIED SUBSET):	ONLINE	**COMPLETE**
PROJECTED ITERATIONS (WITHIN SPECIFIED SUBSET):	11 TO	389
PROJECTED ANSWERS (WITHIN SPECIFIED SUBSET):	5 TO	234

L15 5 SEA SUB=L13 SSS SAM L14

=> => s l14 sub=l13 sss ful  
 FULL SUBSET SEARCH INITIATED 15:46:05 FILE 'REGISTRY'  
 FULL SUBSET SCREEN SEARCH COMPLETED - 238 TO ITERATE

100.0% PROCESSED 238 ITERATIONS 131 ANSWERS  
 SEARCH TIME: 00.00.01

L16 131 SEA SUB=L13 SSS FUL L14

=> s l13 not l16  
 L17 215 L13 NOT L16

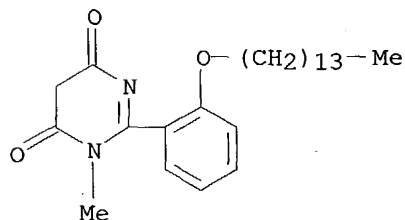
=> => s 117

L18 159 L17

=> d 118 1-50 bib,ab,hitstr

L18 ANSWER 1 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2004:411468 CAPLUS  
 DN 140:415012  
 TI Heat-developable diazo copying paper showing long shelf life and  
 light-resistant images  
 IN Takeuchi, Yosuke; Matsushita, Tetsunori; Arioka, Daisuke  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 28 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004142202	A2	20040520	JP 2002-308443	20021023
PRAI	JP 2002-308443		20021023		
OS	MARPAT 140:415012				
AB	The diazo copying paper contain diazo compds. and pyrimidinedione couplers I (R1 = alkyl, aryl; R2 = H, alkyl, aryl; L = leaving group) or their tautomers in recording layers. The diazo compds. may be encapsulated in polyurethane and/or polyurea microcapsules.				
IT	<b>686769-26-6P</b> RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (couplers; heat-developable diazo copying paper containing pyrimidinedione couplers and showing long shelf life and light-resistant images)				
RN	686769-26-6 CAPLUS				
CN	4,6(1H,5H)-Pyrimidinedione, 1-methyl-2-[2-(tetradecyloxy)phenyl]- (9CI). (CA INDEX NAME)				



L18 ANSWER 2 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:409944 CAPLUS

DN 140:408227

TI Pyrimidinedione azo compounds, their tautomers, and their manufacture

IN Takeuchi, Yosuke; Matsushita, Tetsunori; Arioka, Daisuke

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004143118	A2	20040520	JP 2002-312308	20021028
PRAI	JP 2002-312308		20021028		
OS	MARPAT 140:408227				

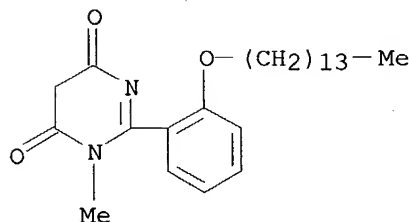
AB The compds., useful for thermal printing materials, etc., are I (R1 = alkyl, aryl; R2 = H, alkyl, aryl; R3-R7 = H, halo, alkyl, aryl, etc.). Thus, 2-methyl-3-[3-[2,4-di(tert-pentyl)phenyloxy]propyl]pyrimidine-4,6-dione was treated with 2-(3-pentyloxy)-4-[N,N-di(N',N'-dibutylaminocarbonylmethyl)amino]benzenediazonium hexafluorophosphate to give 85% I [R1 = Me, R2 = (CH<sub>2</sub>)<sub>3</sub>OX, R3 = R4 = R6 = H, R5 = N[CH<sub>2</sub>C(O)NBu<sub>2</sub>]<sub>2</sub>, R7 = OCH<sub>2</sub>Et, X = 2,4-di(tert-pentyl)phenyl] showing good lightfastness.

IT **686769-26-6**

RL: RCT (Reactant); RACT (Reactant or reagent)

(manufacture of pyrimidinedione azo compds. showing good lightfastness for thermal printing materials)

RN 686769-26-6 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 1-methyl-2-[2-(tetradecyloxy)phenyl]- (9CI)  
(CA INDEX NAME)

L18 ANSWER 3 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2004:353186 CAPLUS  
 DN 140:375177  
 TI Preparation of melanocortin-4 receptor binding compounds  
 IN Vos, Tricia J.; Solomon, Michael E.; Claiborne, Christopher F.; Maguire, Martin P.; Dai, Mingshi; Patane, Michael; Marsilje, Thomas H.  
 PA Millennium Pharmaceuticals, Inc., USA  
 SO U.S. Pat. Appl. Publ., 299 pp., Cont.-in-part of U.S. 6,699,873.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004082779	A1	20040429	US 2003-462436	20030616
	US 6699873	B1	20040302	US 2001-778468	20010207
PRAI	US 1999-147288P	P	19990804		
	US 2000-223277P	P	20000803		
	US 2000-632309	B2	20000804		
	US 2001-778468	A2	20010207		

OS MARPAT 140:375177  
 AB The title compds. of formula B-Z-E [wherein B = an anchor moiety; Z = a central moiety; E = an MC4-R interacting moiety], e.g. I [wherein P1-P4 = (un)substituted C, wherein one of P1-R4 is optionally replaced by N atom, or the ring bearing P1-P4 is thiophene ring wherein P3R4 together are replaced by a S atom; Z1-Z5 = (un)substituted CH; L2 = a bond, (un)substituted C1-2 alkylene, 2 carbon carbonyl chain, wherein one of the carbons is optionally replaced by O, NH, S; t = CH2, CHR3, CR3R4; s = CH2, CHR5, CR5R6, or t-s taken together = CH:CH, CR3:CH, CH:CR5, CR3:CR5; R3-R6 = alkyl, alkylcarbonyl, alkoxyacrbonyl, etc.; R = H, alkyl, alkylcarbonyl], were prepared and tested as melanocortin-4 receptor (MC4-R) binding agonists and antagonists. For example,  $\alpha$ -tolunitrile in THF was added to a solution of diisopropylamine in THF, which had been cooled to -78°C and treated with BuLi. HMPA and 1-chloromethylnaphthalene in THF were added, the reaction cooled and stirred for 1 h, and the reaction quenched with H2O to give 2-(2-naphthalen-1-ylethyl)benzonitrile. Treatment with H2S and 1,3-diaminopropane, followed by heating to 80°C for 72 h and work up, gave II. In a scintillation proximity assay (SPA) using high-throughput receptor binding screening, II showed exemplary inhibition of MC4-R. The invention compds., primarily 2-(2-arylalkylsulfanylphenyl)-4,5-dihydro-1H-imidazole and 1,4,5,6-tetrahydropyrimidine derivs., are useful in the treatment of disorders associated with weight loss (no data). The pharmaceutical composition

comprising the title compds. is claimed.

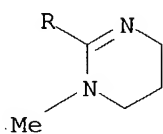
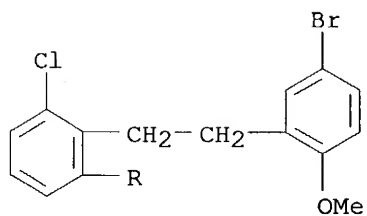
IT 447463-82-3P 447465-79-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and high throughput MC4-R receptor binding screening of arylalkylsulfanylphenyl-substituted imidazoles and pyrimidines and analogs)

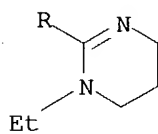
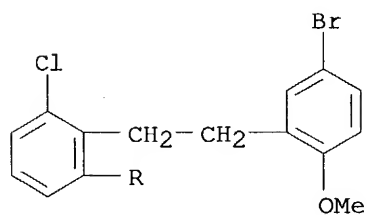
RN 447463-82-3 CAPLUS

CN Pyrimidine, 2-[2-[2-(5-bromo-2-methoxyphenyl)ethyl]-3-chlorophenyl]-1,4,5,6-tetrahydro-1-methyl- (9CI) (CA INDEX NAME)



RN 447465-79-4 CAPLUS

CN Pyrimidine, 2-[2-[2-(5-bromo-2-methoxyphenyl)ethyl]-3-chlorophenyl]-1-ethyl-1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)



L18 ANSWER 4 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2004:352115 CAPLUS  
DN 140:367203  
TI Electrolytes for driving electrolytic capacitors  
IN Kikuchi, Kazunobu; Nakano, Minoru; Kojima, Yoshihiro; Takeichi, Yusuke  
PA Toyama Chemical Industry Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 9 pp.

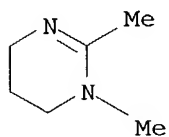
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004134655	A2	20040430	JP 2002-299164	20021011
PRAI	JP 2002-299164		20021011		
AB	The electrolytes consist of polar non-protonic solvents and dissolved bolo-di oxalic acid [O=C-O-(O=C-O-)B(-O-C=O)-O-C=O]H•X or its salt, where X is tertiary amines or diethylamine.				
IT	<b>4271-96-9</b> , 1,2-Dimethyl-1,4,5,6-tetrahydro-pyrimidine RL: DEV (Device component use); USES (Uses) (electrolytes for driving electrolytic capacitors)				
RN	4271-96-9 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)				





L18 ANSWER 5 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:352076 CAPLUS

DN 140:384722

TI Electrolyte for electrolytic capacitor

IN Kikuchi, Kazunobu; Nakano, Minoru; Kojima, Yoshihiro; Takeichi, Yusuke

PA Toyama Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004134458	A2	20040430	JP 2002-295126	20021008
PRAI	JP 2002-295126		20021008		

AB An electrolyte for an electrolytic capacitor, especially an Al electrolytic capacitor, comprises a polar non-aqueous solvent containing a borodiglycolic acid

or its salt. The electrolyte has a superior conductivity and withstand voltage.

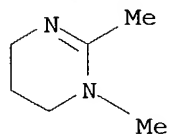
IT **4271-96-9D**, 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine, borodiglycolic acid salts

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(borodiglycolic acid electrolyte for electrolytic capacitor)

RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

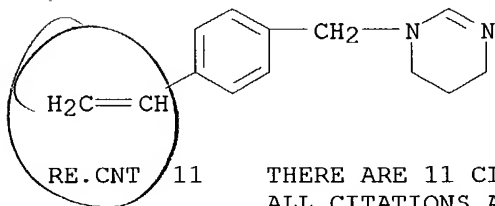


L18 ANSWER 6 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2004:238742 CAPLUS  
 DN 141:71986  
 TI Effective fixation of carbon dioxide and its application to polymer synthesis  
 AU Endo, Takeshi  
 CS Department of Polymer Science and Engineering, Faculty of Engineering, Yamagata University, Yamagata, 992-8510, Japan  
 SO Preprints of Symposia - American Chemical Society, Division of Fuel Chemistry (2004), 49(1), 112-113  
 CODEN: PSADFZ; ISSN: 1521-4648  
 PB American Chemical Society, Division of Fuel Chemistry  
 DT Journal; (computer optical disk)  
 LA English  
 AB Several examples for the CO<sub>2</sub> fixation by amidines and epoxides were described. The reversible fixation-release system of CO<sub>2</sub> by amidine and the polystyrene derivs. having amidine moiety were accomplished. The reaction of epoxide with CO<sub>2</sub> in the presence of alkali metal halides proceeded under atmospheric pressure to afford the corresponding five-membered cyclic carbonate in excellent yield. Further, this reaction was applied to polymer system, i.e., quant. incorporation of CO<sub>2</sub> into poly(glycidyl methacrylate) and polyaddn. of bis(cyclic carbonate)s and diamines to afford the poly(hydroxyurethane)s.  
 IT **712290-32-9DP**, reaction product with carbon dioxide  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (fixation of carbon dioxide with polystyrene derivs. having amidine moiety and epoxy-bearing polymers)  
 RN 712290-32-9 CAPLUS  
 CN Pyrimidine, 1-[(4-ethenylphenyl)methyl]-1,4,5,6-tetrahydro-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 712290-31-8

CMF C13 H16 N2



THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 7 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:176560 CAPLUS

DN 140:217656

TI Preparation of aryl-substituted tetrahydropyrimidines and related compounds as melanocortin-4 receptor binding compounds

IN Maguire, Martin P.; Dai, Mingshi; Vos, Tricia J.

PA Millennium Pharmaceuticals, Inc., USA

SO U.S., 216 pp., Cont.-in-part of U.S. Ser. No. 632309.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6699873	B1	20040302	US 2001-778468	20010207
	WO 2002062766	A2	20020815	WO 2002-US3566	20020207
	WO 2002062766	A3	20021003		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	EP 1363890	A2	20031126	EP 2002-718920	20020207
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	US 2004082779	A1	20040429	US 2003-462436	20030616
PRAI	US 1999-147288P	P	19990804		
	US 2000-223277P	P	20000803		
	US 2000-632309	A2	20000804		
	US 2001-778468	A	20010207		
	WO 2002-US3566	W	20020207		

OS MARPAT 140:217656

AB The title compds. [I and related compds.; A = CH, CF, CCl, C(alkyl), etc.; B = CH, CF, CCl, C(alkyl), etc.; C = CH, CCl, S, etc.; G, H = CH<sub>2</sub>, S; D = CH<sub>2</sub>; E, F = (un)substituted CH<sub>2</sub>; X = C(alkoxy); Y = CH, C(C.tplbond.CH), CCl, CBr, CCl, CF; Z = CH; or pharmaceutically acceptable salts thereof] were prepared for treating a melanocortin-4 receptor (MC4-R) associated state in a mammal. For example, stirring a solution of  $\alpha$ -tolunitrile with diisopropylamine and BuLi in hexanes at -78° under nitrogen for 1 h, followed by addition of HMPA and 1-chloromethylnaphthalene in THF, afforded 2-(2-naphthalen-1-ylethyl)benzonitrile. Heating the benzonitrile with 1,3-diaminopropane in the presence of H<sub>2</sub>S at 80° for 72 h gave the tetrahydropyrimidinyl cycloaddn. product II. The latter exhibited exemplary inhibition of MC4-R in a scintillation proximity assay. I are useful for the treatment of disorders associated with pigmentation, bones, or weight loss (no data).

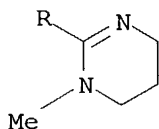
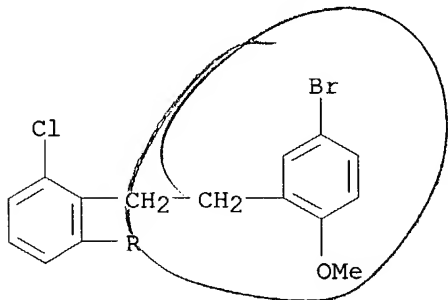
IT **447463-82-3P**, 2-[2-[2-(5-Bromo-2-methoxyphenyl)ethyl]-3-chlorophenyl]-1-methyl-1,4,5,6-tetrahydropyrimidine **447465-79-4P**, 2-[2-[2-(5-Bromo-2-methoxyphenyl)ethyl]-3-chlorophenyl]-1-ethyl-1,4,5,6-tetrahydropyrimidine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(MC4-R binding compound; preparation of aryl-substituted tetrahydropyrimidines and related compds. as melanocortin-4 receptor binding compds. for treatment of pigmentation, bone, and weight loss disorders)

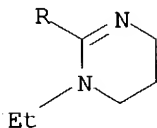
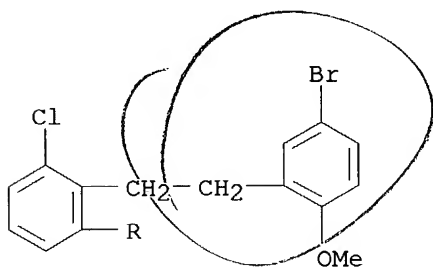
RN 447463-82-3 CAPLUS

CN Pyrimidine, 2-[2-[2-(5-bromo-2-methoxyphenyl)ethyl]-3-chlorophenyl]-1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)



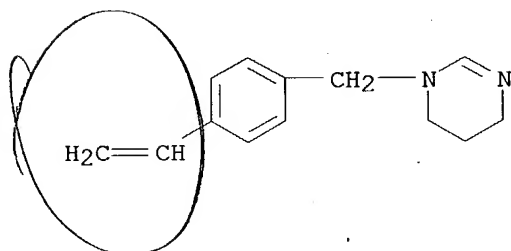
RN 447465-79-4 CAPLUS

CN Pyrimidine, 2-[2-[2-(5-bromo-2-methoxyphenyl)ethyl]-3-chlorophenyl]-1-ethyl-1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)



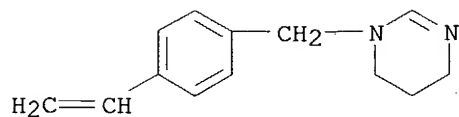
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 8 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2004:146747 CAPLUS  
 DN 140:339732  
 TI A Novel Construction of a Reversible Fixation-Release System of Carbon Dioxide by Amidines and Their Polymers  
 AU Endo, Takeshi; Nagai, Daisuke; Monma, Tomohiro; Yamaguchi, Hiroshi; Ochiai, Bungo  
 CS Department of Polymer Science and Engineering, Faculty of Engineering, Yamagata University, Yamagata, Yonezawa, 992-8510, Japan  
 SO Macromolecules (2004), 37(6), 2007-2009  
 CODEN: MAMOBX; ISSN: 0024-9297  
 PB American Chemical Society  
 DT Journal  
 LA English  
 AB We developed the reversible fixing system of carbon dioxide by amidines. The N,N,N'-trialkylamidine derivative N-methyltetrahydropyrimidine exhibited reversible fixation-release of CO<sub>2</sub>. Polymers bearing an amidine moiety that can fix CO<sub>2</sub> both in solution and solid state were successfully synthesized. The polymer film containing the amidine moiety could fix and release CO<sub>2</sub> reversibly and might be applicable for CO<sub>2</sub> storage materials that can recover CO<sub>2</sub> from industrial waste gases and can provide a carbon source to synthesize useful substances.  
 IT **680576-57-2P 680576-58-3P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (novel construction of reversible fixation-release system of carbon dioxide by amidines and their polymers)  
 RN 680576-57-2 CAPLUS  
 CN Pyrimidine, 1-[(4-ethenylphenyl)methyl]-1,4,5,6-tetrahydro-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 680576-58-3 CAPLUS  
 CN Pyrimidine, 1-[(4-ethenylphenyl)methyl]-1,4,5,6-tetrahydro-, monohydrochloride, homopolymer (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 680576-57-2  
 CMF C13 H16 N2 . Cl H



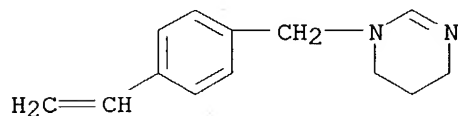
● HCl

IT **680576-58-3DP**, dehydrochlorinated  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (novel construction of reversible fixation-release system of carbon  
 dioxide by amidines and their polymers)  
 RN 680576-58-3 CAPLUS  
 CN Pyrimidine, 1-[(4-ethenylphenyl)methyl]-1,4,5,6-tetrahydro-,  
 monohydrochloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 680576-57-2

CMF C13 H16 N2 . Cl H



● HCl

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 9 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:935768 CAPLUS

DN 138:321224

TI Stereomutations of conformational atropisomers of hindered  
1,2-diaryltetrahydropyrimidinesAU Garcia, M. Beatriz; Grilli, Stefano; Lunazzi, Lodovico; Mazzanti, Andrea;  
Orelli, Liliana R.CS Department of Organic Chemistry "A. Mangini", University of Bologna,  
Bologna, 40136, ItalySO European Journal of Organic Chemistry (2002), (23), 4018-4023  
CODEN: EJOCFK; ISSN: 1434-193X

PB Wiley-VCH Verlag GmbH &amp; Co. KGaA

DT Journal

LA English

OS CASREACT 138:321224

AB The barriers required to interconvert the conformational enantiomers (atropisomers) of three 2-(o-halophenyl)-1-mesityl-1,4,5,6-tetrahydropyrimidines (the ortho-halogen substituents being I, Br, Cl) have been measured by low-temperature <sup>1</sup>H NMR spectroscopy. In addition, the barrier for the inversion of the heterocyclic six-membered ring has been determined by monitoring the <sup>13</sup>C NMR spectra at even lower temps. When the mesityl substituent is replaced by a 2,3-dimethylphenyl group, two stereogenic axes are created, generating two diastereomeric conformers. These were identified by low-temperature NMR as existing in a 10:1 population ratio, with a 11.5 kcal·mol<sup>-1</sup> interconversion barrier.

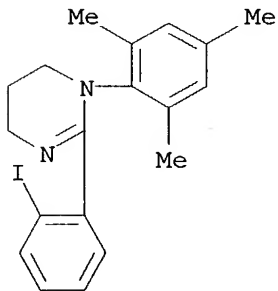
IT 512802-77-6P 512802-78-7P 512802-79-8P

512802-80-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and stereomutations of conformational atropisomers of hindered  
diaryltetrahydropyrimidines)

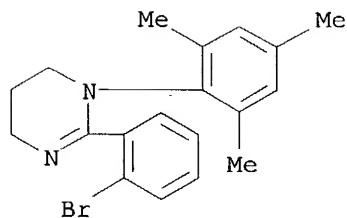
RN 512802-77-6 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-2-(2-iodophenyl)-1-(2,4,6-trimethylphenyl)-  
(9CI) (CA INDEX NAME)



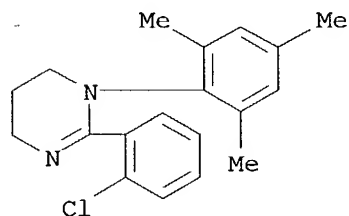
RN 512802-78-7 CAPLUS

CN Pyrimidine, 2-(2-bromophenyl)-1,4,5,6-tetrahydro-1-(2,4,6-trimethylphenyl)-  
(9CI) (CA INDEX NAME)



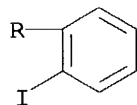
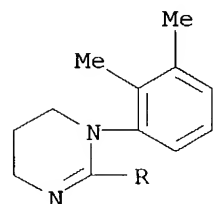
RN 512802-79-8 CAPLUS

CN Pyrimidine, 2-(2-chlorophenyl)-1,4,5,6-tetrahydro-1-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 512802-80-1 CAPLUS

CN Pyrimidine, 1-(2,3-dimethylphenyl)-1,4,5,6-tetrahydro-2-(2-iodophenyl)- (9CI) (CA INDEX NAME)



RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT



L18 ANSWER 10 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:615577 CAPLUS

DN 137:169536

TI Preparation of aryl-substituted tetrahydropyrimidines and related compounds as melanocortin-4 receptor binding compounds

IN Maguire, Martin P.; Dai, Mingshi; Vos, Tricia J.

PA Millennium Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 228 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002062766	A2	20020815	WO 2002-US3566	20020207
	WO 2002062766	A3	20021003		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 6699873	B1	20040302	US 2001-778468	20010207
EP 1363890	A2	20031126	EP 2002-718920	20020207

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI US 2001-778468	A	20010207
US 1999-147288P	P	19990804
US 2000-223277P	P	20000803
US 2000-632309	A2	20000804
WO 2002-US3566	W	20020207

OS MARPAT 137:169536

AB Title compds. I [wherein A and B = independently (un)substituted biaryl, (hetero)aryl, Ph, (cyclo)alkyl, (cyclo)alkoxy, alkenyl, alkynyl, OH, acyl(oxy), carbamoyl, amino, thiol, amidino, imino, NO<sub>2</sub>, N<sub>3</sub>, etc.; L1 and L2 = covalent bond or (un)substituted alkyl optionally interrupted by O, S, or N; r = covalent bond, CH, CH<sub>2</sub>, CHR<sub>1</sub>, CR<sub>1</sub>R<sub>2</sub>, or H; t = CH, CH<sub>2</sub>, CHR<sub>3</sub>, CR<sub>3</sub>R<sub>4</sub>, or H; s = CHR<sub>5</sub>, CR<sub>5</sub>R<sub>6</sub>, or absent; R = H, (un)substituted alkyl, arylalkyl, or heteroalkyl, and may optionally be linked to A, B, L1, or L2; R<sub>1</sub>-R<sub>6</sub> = independently (un)substituted alkyl, halo, thiol, thioether, thioalkyl, alkoxy, and may be optionally linked to each other to form addnl. ring moieties, e.g., quinoxaliny; or pharmaceutically acceptable salts thereof] were prepared as melanocortin-4 receptor binding (MC4-R) compds. For example, stirring a solution of  $\alpha$ -tolunitrile with diisopropylamine and BuLi in hexanes at -78° under nitrogen for 1 h, followed by addition of HMPA and 1-chloromethylnaphthalene in THF, afforded 2-(2-naphthalen-1-ylethyl)benzonitrile. Heating the benzonitrile with 1,3-diaminopropane in the presence of H<sub>2</sub>S at 80° for 72 h gave the tetrahydropyrimidinyl cycloaddn. product II. The latter exhibited exemplary inhibition of MC4-R in a scintillation proximity assay. I are useful for the treatment of disorders associated with pigmentation, bones, or weight loss (no data).

IT **447463-82-3P**, 2-[2-[2-(5-Bromo-2-methoxyphenyl)ethyl]-3-chlorophenyl]-1-methyl-1,4,5,6-tetrahydropyrimidine **447465-79-4P**

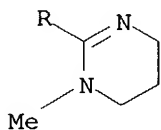
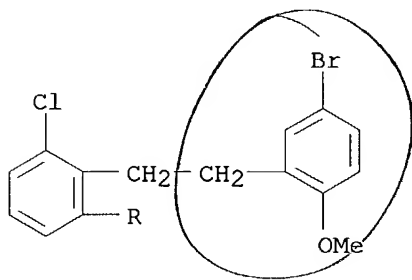
, 2-[2-[2-(5-Bromo-2-methoxyphenyl)ethyl]-3-chlorophenyl]-1-ethyl-1,4,5,6-tetrahydropyrimidine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(MC4-R binding compound; preparation of aryl-substituted tetrahydropyrimidines and related compds. as melanocortin-4 receptor binding compds. for treatment of pigmentation, bone, and weight loss disorders)

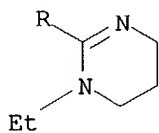
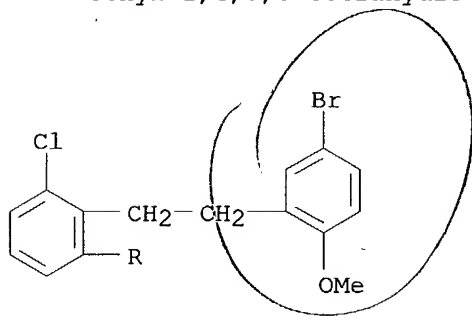
RN 447463-82-3 CAPLUS

CN Pyrimidine, 2-[2-[2-(5-bromo-2-methoxyphenyl)ethyl]-3-chlorophenyl]-1,4,5,6-tetrahydro-1-methyl- (9CI) (CA INDEX NAME)



RN 447465-79-4 CAPLUS

CN Pyrimidine, 2-[2-[2-(5-bromo-2-methoxyphenyl)ethyl]-3-chlorophenyl]-1-ethyl-1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)



L18 ANSWER 11 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:369013 CAPLUS

DN 136:386584

TI Amine organoborane complex polymerization initiators and polymerizable compositions

IN Sonnenschein, Mark F.; Webb, Steven P.; Rondan, Nelson G.

PA Dow Global Technologies Inc., USA

SO U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U.S. Ser. No. 466,321.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002058764	A1	20020516	US 2001-881980	20010615
	US 6730759	B2	20040504		
	US 6806330	B1	20041019	US 1999-466321	19991217
PRAI	US 1999-466321	A2	19991217		

OS MARPAT 136:386584

AB Invention is polymerizable composition comprising (a) an organoborane/amine complex wherein the organoborane is a trialkyl borane or an alkyl cycloalkyl borane and the amine is selected from the group of amines having an amidine structural component; aliphatic heterocycles having  $\geq 1$  N in the heterocyclic ring; an alicyclic compound having bound to the ring a substituent having an amine moiety; primary amines which in addition to a primary amine have  $\geq 1$  H bond accepting groups of an ether, polyether, thioether or halogen wherein there is an alkylene chain of  $\geq 2$  C atoms between the primary amine and the H bond accepting group, and conjugated imines; and, (b)  $\geq 1$  of monomers, oligomers or polymers having olefinic unsatn.; and optionally (c) an effective amount of a compound which causes the complex to disassocn. wherein the compound which causes disassocn. of the complex is kept sep. from the complex until initiation of polymerization is desired.

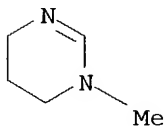
IT 2304-03-2D, borane complex

RL: CAT (Catalyst use); USES (Uses)

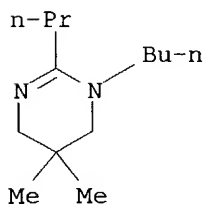
(amine organoborane complex polymerization initiators and polymerizable compns.)

RN 2304-03-2 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

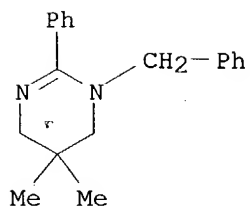


L18 ANSWER 12 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:348362 CAPLUS  
 DN 137:63223  
 TI Catalytic Oxidative Carbonylation of Primary and Secondary Diamines to Cyclic Ureas. Optimization and Substituent Studies  
 AU Qian, Fang; McCusker, Jennifer E.; Zhang, Yue; Main, A. Denise; Chlebowski, Mary; Kokka, Michio; McElwee-White, Lisa  
 CS Department of Chemistry and Center for Catalysis, University of Florida, Gainesville, FL, 32611-7200, USA  
 SO Journal of Organic Chemistry (2002), 67(12), 4086-4092  
 CODEN: JOCEAH; ISSN: 0022-3253  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 137:63223  
 AB W(CO)6-catalyzed oxidative carbonylation of 1,3-propanediamine to the corresponding urea has been examined under a variety of conditions. Following optimization, the Thorpe-Ingold effect on ring closure was studied using 2,2-dialkyl-1,3-propanediamines. For the 2,2-dimethyl- and 2,2-dibutyl-1,3-propanediamines, the yields were increased significantly as compared to that of the unsubstituted case. The eight-membered cyclic urea 5-butyl-5-ethyl-1,3-diazepan-2-one was formed in 38% yield, while only trace amts. of the cyclic urea were produced from the parent 1,5-pentanediamine. In a study of secondary diamines, yields from the carbonylation of N,N'-dialkyl-2,2-dimethyl-1,3-propanediamines were lower than those obtained from the primary diamines. The main byproducts from secondary diamines were tetrahydropyrimidine derivs., formed by a competitive reaction of the substrate with the oxidant and base.  
 IT **439280-97-4P 439280-98-5P 439280-99-6P**  
 RL: BYP (Byproduct); PREP (Preparation)  
 (catalytic oxidative carbonylation of primary and secondary diamines to cyclic ureas)  
 RN 439280-97-4 CAPLUS  
 CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-5,5-dimethyl-2-propyl-, monohydriodide (9CI) (CA INDEX NAME)



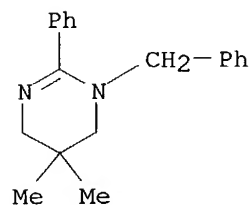
● HI

RN 439280-98-5 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-5,5-dimethyl-2-phenyl-1-(phenylmethyl)-, monohydriodide (9CI) (CA INDEX NAME)



● HI

RN 439280-99-6 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-5,5-dimethyl-2-phenyl-1-(phenylmethyl)-  
 (9CI) (CA INDEX NAME)



RE.CNT 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 13 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:31355 CAPLUS  
 DN 136:71142  
 TI Pneumatic tires with run-flat durability and riding comfortability  
 IN Teratani, Hiroyuki; Motofusa, Shinichi; Kondo, Hajime; Nishikawa, Tomohisa; Kusano, Yukihiro; Zuigyuu, Yugo  
 PA Bridgestone Corporation, Japan  
 SO PCT Int. Appl., 116 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002002356	A1	20020110	WO 2001-JP5773	20010703
	W: JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	JP 2002036831	A2	20020206	JP 2000-220137	20000721
	JP 2002037927	A2	20020206	JP 2000-220255	20000721
	JP 2002036832	A2	20020206	JP 2000-220547	20000721
	JP 2002079803	A2	20020319	JP 2001-202744	20010703
	EP 1297974	A1	20030402	EP 2001-945807	20010703
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	JP 2002103911	A2	20020409	JP 2001-221519	20010723
	JP 2002103912	A2	20020409	JP 2001-221520	20010723
	JP 2002144807	A2	20020522	JP 2001-259268	20010829
PRAI	JP 2000-200490	A	20000703		
	JP 2000-220137	A	20000721		
	JP 2000-220255	A	20000721		
	JP 2000-220547	A	20000721		
	JP 2000-222144	A	20000724		
	JP 2000-222145	A	20000724		
	JP 2000-258852	A	20000829		
	JP 2000-263350	A	20000831		
	WO 2001-JP5773	W	20010703		

AB Title tires contain hard rubber components on the beads and/or rubber components on the sidewalls prepared from rubber compns. which show min. dynamic modulus (A1) at 200-250° of ≥75% of dynamic modulus (A2) at 50° and/or contain conjugated diene rubbers with ≥25% units of vinyl configuration and/or rubbers containing ≥40% of N- and/or Si-containing conjugated diene rubbers. A composition containing natural

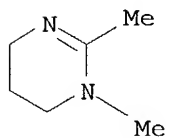
rubber 20, JSR BR 01 80, Vulcuren trial product KA 9188 (I) 3.0, carbon black 60, and S 5 parts was vulcanized to form a sheet with A2 of 11.4 MPa and A1/A2 of 87.4%, which was used to form the sidewall component (at interior of carcass) of a tire showing riding comfortability index 5.5 and run-flat durability index 109%; vs. 5.0 and 100% for a tire prepared from a I-free similar composition with A1/A2 of 70%.

IT 4271-96-9, 2,3-Dimethyl-3,4,5,6-tetrahydropyrimidine  
 RL: CPS (Chemical process); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)  
 (terminal modification agent for conjugated diene rubber; rubber compns. with controlled dynamic modulus or specific conjugated diene rubbers for tire beads or sidewalls)

RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX

NAME)



RE.CNT 23      THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 14 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:793434 CAPLUS

DN 135:339275

TI Cyclic amidines, nicotinic acetylcholine  $\alpha 4\beta 2$  receptor activators containing them, and pharmaceuticals

IN Imoto, Masahiro; Iwanami, Tatsuya; Akabane, Minako; Tani, Yoshihiro

PA Suntory, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

*Appl. Foreign*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001302643	A2	20011031	JP 2000-120976	20000421
	CA 2372673	AA	20011101	CA 2001-2372673	20010420
	WO 2001081334	A2	20011101	WO 2001-JP3378	20010420
	WO 2001081334	A3	20020808		
	W: AU, CA, CN, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	AU 2001048799	A5	20011107	AU 2001-48799	20010420
	EP 1280793	A2	20030205	EP 2001-921932	20010420
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	US 2003100769	A1	20030529	US 2001-9477	20011211
PRAI	JP 2000-120976	A	20000421		
	WO 2001-JP3378	W	20010420		

OS MARPAT 135:339275

AB The activators, useful for treatment of brain function disorders, contain cyclic amidines I [A1, A2 = H, (un)substituted alkyl, (un)substituted aryl, (un)substituted heterocyclyl; X = (un)substituted C<sub>2</sub>H<sub>4</sub>, (un)substituted CH:CH, (un)substituted (CH<sub>2</sub>)<sub>3</sub>, (un)substituted CH<sub>2</sub>CH<sub>2</sub>NH] or their salts. Trimethylenediamine was cyclocondensed with Et (6-chloro-3-pyridyl)acetate and treated with fumaric acid to give I fumarate (A1 = H, A2 = 6-chloro-3-pyridylmethyl, X = CH:CH), which showed affinity with rat nicotinic acetylcholine  $\alpha 4\beta 2$  receptor with K<sub>i</sub> of 29 nM, vs. 1.6 nM, for nicotine. Pharmaceutical formulations containing I are given.

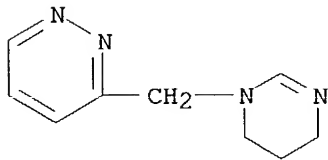
IT 371122-82-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of cyclic amidines as nicotinic acetylcholine  $\alpha 4\beta 2$  receptor activators)

RN 371122-82-6 CAPLUS

CN Pyridazine, 3-[(5,6-dihydro-1(4H)-pyrimidinyl)methyl]- (9CI) (CA INDEX NAME)





L18 ANSWER 15 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:693292 CAPLUS  
 DN 135:242242  
 TI Process for the preparation of (libraries of) tetrasubstituted-quinazolines  
 IN Dener, Jeffrey Mark; Lease, Timothy G.; Novack, Aaron Robert  
 PA Chemrx Advanced Technologies, Inc., USA  
 SO PCT Int. Appl., 55 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001068615	A1	20010920	WO 2001-US8014	20010313
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, US, AE, AG, AL, AM, AT, AU RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI US 2000-189067P P 20000313

OS CASREACT 135:242242; MARPAT 135:242242

AB Presented is a synthetic process I [G0 = CH2SS] and I [G0 = H; II] [wherein; SS = solid support; R1 = H, alkyl, alkyl(hetero)aryl, alkyl(hetero)cycloalkyl; R2, R3 = H, , alkyl, (hetero)aryl, alkyl(hetero)cycloalkyl or R2, R3 with the nitrogen atom to which they are attached form a heterocycloalkyl ring; R4, R5 = halo, H, alkyl, O-alkyl, CON(alkyl)2, NO2, N(alkyl)2]. Treatment of III [G1, G2 = leaving group] with R1NHCH2SS at a temperature of 0 - 145°C, in a suitable medium (e.g. DMF, toluene, etc.), using a base (e.g. (i-Pr)2NEt, Et3N) provides (an array of) intermediate III [G1 = R1NCH2SS; G2 = leaving group; IV]. IV, when reacted with NHR2R3 in a suitable medium using an optional base at a temperature of 50 - 200°C yields I [G0 = CH2SS]. II is formed by reaction of I with acid (e.g. TFA, HF, CF3SO3H, etc.). The process also provides for derivatization of the 2-amino group of II using a coupling agent and acylation reagent (e.g. carboxylic acid, sulfonyl chloride, etc.). The invention is illustrated by the synthesis of over 15 quinazolines of formula II.

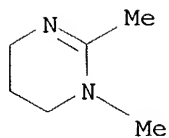
IT 4271-96-9, 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine

RL: NUU (Other use, unclassified); USES (Uses)

(process for the preparation of (libraries of) 2,4,6,7-tetrasubstituted-quinazolines)

RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RE.CNT 12      THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 16 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:662571 CAPLUS

DN 136:5591

TI Conformational Studies by Dynamic NMR. 84.1 Structure, Conformation, and Stereodynamics of the Atropisomers of N-Aryl-tetrahydropyrimidines

AU Garcia, Ma. Beatriz; Grilli, Stefano; Lunazzi, Lodovico; Mazzanti, Andrea; Orelli, Liliana R.

CS Department of Organic Chemistry "A. Mangini", University of Bologna, Bologna, 40136, Italy

SO Journal of Organic Chemistry (2001), 66(20), 6679-6684

CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

OS CASREACT 136:5591

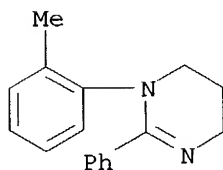
AB The existence of stereolabile atropisomers for a number of N-aryl-tetrahydropyrimidines in solution has been deduced from the observation of the anisochronous NMR signals of prochiral methylene groups. The interconversion barriers for these atropisomers have been measured by line shape anal. of dynamic NMR spectra at various temps.: a mol. mechanics modeling resulted in good agreement with these values. In an appropriate case, distinct NMR signals for the two enantiomeric forms could be observed at ambient temperature in a chiral environment. Evidence was also obtained for an exchange process occurring between two conformers experiencing a very biased equilibrium. Single-crystal X-ray diffraction of one such compound yielded a mol. structure in good agreement with the results obtained by ab initio calcns.

IT 374966-11-7P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(NMR study on structure, conformation, and stereodynamics of atropisomers of N-aryltetrahydropyrimidines)

RN 374966-11-7 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-(2-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)

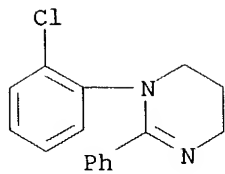


IT 374965-95-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(crystal structure; NMR study on structure, conformation, and stereodynamics of atropisomers of N-aryltetrahydropyrimidines)

RN 374965-95-4 CAPLUS

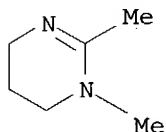
CN Pyrimidine, 1-(2-chlorophenyl)-1,4,5,6-tetrahydro-2-phenyl- (9CI) (CA INDEX NAME)



RE.CNT 34      THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 17 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:403453 CAPLUS  
 DN 135:19773  
 TI Preparation of 3-(trialkylsiloxy)azetidines and their intermediates  
 IN Tagata, Takeshi  
 PA Koei Chemical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001151784	A2	20010605	JP 1999-330478	19991119
PRAI	JP 1999-330478		19991119		
OS	CASREACT 135:19773; MARPAT 135:19773				
AB	Title compds. I (R1 = alkyl, aralkyl; R2-R4 = alkyl) are prepared by reaction of R1NHSiR2R3R4 (R1-R4 = same as I) with epihalohydrins in the presence of solid acid catalysts and cyclization of the resulting R1NHCH2CH(CH2X)OSiR2R3R4 (R1-R4 = same as I) in the presence of organic bases with pKa ≥ 11. E.g., PhCH2NH2 was silylated by Me3SiCl in C6H6 in the presence of NEt3 at 0-10° for 1 h, treated with epichlorohydrin in the presence of activated alumina at 22-25° for 4 h, and cyclized using 1,5-diazabicyclo[4.3.0]nonene-5 in MeCN under reflux for 5.5 h to give 42% I (R1 = PhCH2, R2-R4 = Me).				
IT	<b>4271-96-9</b> , 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of (trialkylsiloxy)azetidines by cyclization of aminohalopropanes using organic bases)				
RN	4271-96-9 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)				



L18 ANSWER 18 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:75215 CAPLUS

DN 134:148370

TI Solvent-free, ambient temperature-hardening compositions for production of adhesives, gaskets, sealants, moldings, and coatings

IN Tillack, Joerg; Puetz, Wolfgang; Schmalstieg, Lutz

PA Bayer A.-G., Germany

SO Ger. Offen., 8 pp.

CODEN: GWXXBX

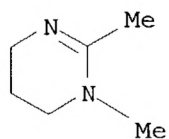
DT Patent

LA German

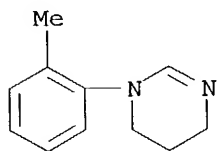
FAN.CNT 1

*Same as # 21*

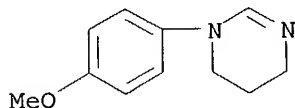
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	DE 19935325	A1	20010201	DE 1999-19935325	19990728	
	CA 2388300	AA	20010208	CA 2000-2388300	20000717	
	WO 2001009219	A1	20010208	WO 2000-EP6801	20000717	
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
	BR 2000012778	A	20020507	BR 2000-12778	20000717	
	EP 1204691	A1	20020515	EP 2000-944041	20000717	
	EP 1204691	B1	20031001			
	R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, IE, SI, LT, LV, FI, RO, MK, CY, AL		
	JP 2003506506	T2	20030218	JP 2001-514023	20000717	
	AT 251192	E	20031015	AT 2000-944041	20000717	
	PT 1204691	T	20040227	PT 2000-944041	20000717	
	ES 2208363	T3	20040616	ES 2000-944041	20000717	
	TW 567197	B	20031221	TW 2000-89114866	20000726	
PRAI	DE 1999-19935325	A	19990728			
	WO 2000-EP6801	W	20000717			
AB	Solvent-free, ambient temperature-hardening compns. based on blocked polyisocyanates (prepared phenolic OH-containing hydrocarbon resins as blocking agents), primary amines, epoxide group-containing compds., and 2,3-Dimethyl-3,4,5,6-tetrahydropyrimidine catalyst are useful for transparent adhesives and sealants and in the manufacture of transparent gaskets, moldings, and coatings.					
IT	4271-96-9, 2,3-Dimethyl-3,4,5,6-tetrahydropyrimidine RL: CAT (Catalyst use); USES (Uses) (solvent-free, ambient temperature-hardening compns. for production of transparent adhesives, gaskets, sealants, moldings, and coatings)					
RN	4271-96-9 CAPLUS					
CN	Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)					



L18 ANSWER 19 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2000:799003 CAPLUS  
 DN 134:71559  
 TI Synthesis of 1-aryl-1,4,5,6-tetrahydropyrimidines and 1-aryl-3-substituted  
 1,4,5,6-tetrahydropyrimidinium salts  
 AU Orelli, Liliana R.; Garcia, Maria B.; Perillo, Isabel A.  
 CS Departamento de Quimica Organica, Facultad de Farmacia y Bioquimica,  
 Universidad de Buenos Aires, Buenos Aires, 1113, Argent.  
 SO Heterocycles (2000), 53(11), 2437-2450  
 CODEN: HTCYAM; ISSN: 0385-5414  
 PB Japan Institute of Heterocyclic Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 134:71559  
 AB A synthetic approach to 1-aryl-1,4,5,6-tetrahydropyrimidines (I) is  
 described, by ring closure of N-aryl-N'-formyl-1,3-propanediamines with  
 trimethylsilyl polyphosphate. Quaternization of I with Me (or ethyl)  
 iodide led to the corresponding cyclic amidinium salts, while treatment of  
 I (aryl = 2-MeC6H4) with 2,4-dinitrochlorobenzene yielded an open chain  
 product resulting from hydrolysis of the salt. An alternative method was  
 employed for the synthesis of 1-aryl-1,4,5,6-tetrahydropyrimidinium salts  
 bearing a branched alkyl or an aryl substituent on N3, not accessible  
 through alkylation. Such compds. were obtained in high yields by  
 dehydrogenation of the corresponding hexahydropyrimidines.  
 IT **316161-68-9P 316161-70-3P 316161-72-5P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of aryltetrahydropyrimidines and aryltetrahydropyrimidinium  
 salts)  
 RN 316161-68-9 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)

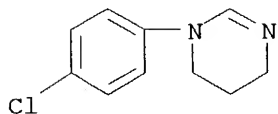


RN 316161-70-3 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



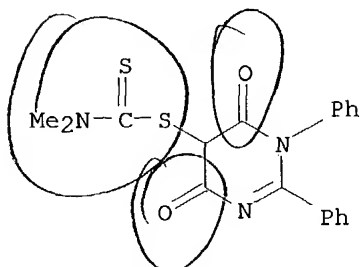
RN 316161-72-5 CAPLUS  
 CN Pyrimidine, 1-(4-chlorophenyl)-1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)



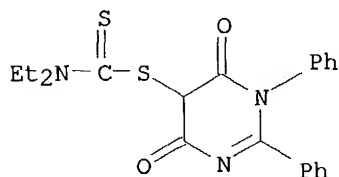


RE.CNT 31      THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 20 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2000:708001 CAPLUS  
 DN 134:17469  
 TI Sulfenylation of heterocyclic 1,3-dicarbonyl systems: 4-hydroxy-2-pyrones, 6-hydroxy-4-pyrimidones, 4-hydroxy-2-pyridones, 4-hydroxy-6-pyridazinones, and 5-hydroxy-3-pyrazolones  
 AU Schnell, Barbara; Kappe, Thomas  
 CS Institut für Chemie, Organische und Bioorganische Chemie, Karl-Franzens Universität Graz, Graz, A-8010, Austria  
 SO Journal of Heterocyclic Chemistry (2000), 37(4), 911-919  
 CODEN: JHTCAD; ISSN: 0022-152X  
 PB HeteroCorporation  
 DT Journal  
 LA English  
 OS CASREACT 134:17469  
 AB Anions of enolized heteroarom. 1,3-dicarbonyl systems, such as the title compds., react in DMF in the presence of potassium carbonate with diaryl disulfides to yield arylsulfenyl derivs. Arylthiolate anions formed in this reaction can be oxidized by air to yield the starting disulfides again. Tetraalkylthiuram disulfides react in the same manner to yield dialkylaminothiocarbonylthio derivs. of the title compds. Oxidation of the arylsulfenyl derivs. with hydrogen peroxide in sodium hydroxide solution usually leads to sulfoxides, whereas oxidation with peracetic acid affords sulfones.  
 IT **310441-87-3P 310441-88-4P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 310441-87-3 CAPLUS  
 CN Carbamodithioic acid, dimethyl-, 1,4,5,6-tetrahydro-4,6-dioxo-1,2-diphenyl-5-pyrimidinyl ester (9CI) (CA INDEX NAME)



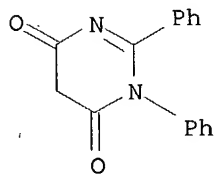
RN 310441-88-4 CAPLUS  
 CN Carbamodithioic acid, diethyl-, 1,4,5,6-tetrahydro-4,6-dioxo-1,2-diphenyl-5-pyrimidinyl ester (9CI) (CA INDEX NAME)



IT **94205-66-0**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (sulfenylation of heterocyclic dicarbonyl compds. (hydroxypyrones, hydroxypyridones, hydroxypyrimidones, hydroxypyridazinones, hydroxypyrazolones))

RN 94205-66-0 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- (7CI, 9CI) (CA INDEX NAME)



RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 21 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:545394 CAPLUS

DN 131:192954

TI Electrolytic solution containing N,N'-dimethylpropyleneurea for electrolytic capacitor and the electrolytic capacitor

IN Nitta, Yukihiro; Mori, Yoshiyuki

PA Matsushita Electric Industrial Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

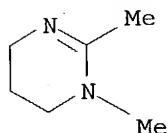
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11233377	A2	19990827	JP 1998-30954	19980213
PRAI	JP 1998-30954		19980213		

AB The solution contains an organic solvent containing N,N'-dimethylpropyleneurea (I) and an organic acid salt as an electrolyte. The electrolytic capacitor using the solution, especially, surface-mounted type capacitor involving Pb-free metal layer on the lead wires, is also claimed. The solution containing I with high b.p. and low vaporization pressure at  $\geq 200^\circ$  can be used for the capacitor without deforming in manufacture including high temperature processing.

IT **4271-96-9**, 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (electrolytic solution containing N,N'-dimethylpropyleneurea as solvent for surface-mounted-type electrolytic capacitor)

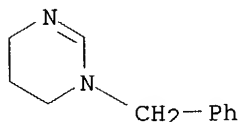
RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

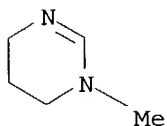


*Same as #10*

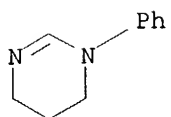
L18 ANSWER 22 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1999:218207 CAPLUS  
 DN 130:338236  
 TI 2-Imidazoline- and 1,4,5,6-tetrahydropyrimidine-ruthenium(II) complexes  
 and catalytic synthesis of furan  
 AU Cetinkaya, Bekir; Alici, Bulent; Ozdemir, Ismail; Bruneau, Christian;  
 Dixneuf, Pierre H.  
 CS Inonu Universitesi, Fen-Edebiyat Fakultesi, Malatya, 44280, Turk.  
 SO Journal of Organometallic Chemistry (1999), 575(2), 187-192  
 CODEN: JORCAI; ISSN: 0022-328X  
 PB Elsevier Science S.A.  
 DT Journal  
 LA English  
 AB The complexes  $\text{RuCl}_2(\text{L1})(\text{arene})$  (3-4) ( $\text{L1} = \text{HC:NCH}_2\text{CH}_2\text{NR}$ ,  $\text{R} = \text{Et}$ , arene =  
 $p\text{-MeC}_6\text{H}_4\text{CHMe}_2$  or  $\text{C}_6\text{Me}_6$ ) and  $\text{RuCl}_2(\text{L2})(\text{arene})$  (5-6) ( $\text{L2} =$   
 $\text{HC:NCHCH}_2\text{CH}_2\text{CH}_2\text{NR}$ ,  $\text{R} = \text{Me}$ ,  $\text{Ph}$ ,  $\text{CH}_2\text{Ph}$ ,  $p\text{-MeC}_6\text{H}_4$ ) were synthesized by  
 reaction of  $[\text{RuCl}_2(\text{arene})]_2$  with 1-alkyl-2-imidazoline (1) or  
 1-alkyl-1,4,5,6-tetrahydropyrimidine (2). In each of these complexes  
 (3-6) the ligand is bound via the imine ( $\text{N:C}$ ) N atom. The new complexes  
 are capable of catalyzing the activation of (Z)-3-methylpent-2-en-4-yn-1-  
 ol into 2,3-dimethylfuran in very good yield, via intramol. cyclization,  
 and the 1,4,5,6-tetrahydropyrimidine complexes 5 and 6 appeared to be the  
 best catalyst precursors. Cyclic voltammetry shows that the nature of the  
 arene ligand, rather than that of the N containing ligand, controls the  
 electron-richness of the complexes.  
 IT 1602-94-4 2304-03-2 187149-87-7  
 187149-90-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (ligand substitution reaction with areneruthenium chloride to give  
 tetrahydropyrimidine half-sandwich complex)  
 RN 1602-94-4 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 2304-03-2 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

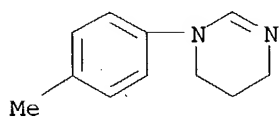


RN 187149-87-7 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-phenyl- (9CI) (CA INDEX NAME)



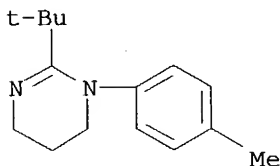
RN 187149-90-2 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-(4-methylphenyl)- (9CI) (CA INDEX NAME)

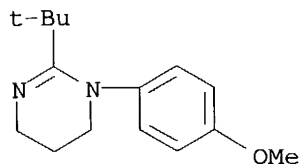


RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 23 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1999:216708 CAPLUS  
 DN 130:352243  
 TI Synthesis and properties of 1-aryl-2-alkyl-1,4,5,6-tetrahydropyrimidines  
 AU Orelli, Liliãna R.; Niemevz, Fernando; Garcia, Maria B.; Perillo, Isabel A.  
 CS Departamento de Quimica Organica, Facultad de Farmacia y Bioquimica, Universidad de Buenos Aires, Buenos Aires, Argent.  
 SO Journal of Heterocyclic Chemistry (1999), 36(1), 105-112  
 CODEN: JHTCAD; ISSN: 0022-152X  
 PB HeteroCorporation  
 DT Journal  
 LA English  
 OS CASREACT 130:352243  
 AB A general method is described for the synthesis of 1-aryl-2-alkyl-1,4,5,6-tetrahydropyrimidines 1, by cyclization of N-acyl-N'-aryltrimethylenediamines with trimethylsilyl polyphosphate. The precursors were obtained by aminolysis of corresponding N-(3-bromopropyl)amides. The 1H NMR spectra of tetrahydropyrimidines were analyzed, discussing the influence of substituents in positions 1 and 2 of the heterocyclic ring. Alkaline hydrolysis of compds. tetrahydropyrimidines, which originates exclusively N-acyl-N'-aryltrimethylenediamines, through an intermediate carbinolamine, was also studied. Cleavage of such an intermediate is discussed in the light of the stereoelectronic control theory. Reduction of tetrahydropyrimidines with borane, leads regiospecifically to N-alkyl-N'-aryltrimethylenediamines.  
 IT **224314-05-0P 224314-06-1P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 224314-05-0 CAPLUS  
 CN Pyrimidine, 2-(1,1-dimethylethyl)-1,4,5,6-tetrahydro-1-(4-methylphenyl)-(9CI) (CA INDEX NAME)



RN 224314-06-1 CAPLUS  
 CN Pyrimidine, 2-(1,1-dimethylethyl)-1,4,5,6-tetrahydro-1-(4-methoxyphenyl)-(9CI) (CA INDEX NAME)



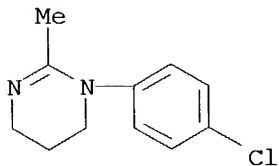
IT **224314-00-5P 224314-01-6P 224314-02-7P**  
**224314-03-8P 224314-04-9P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation of (aryl) (alkyl) tetrahydropyrimidine derivs.)

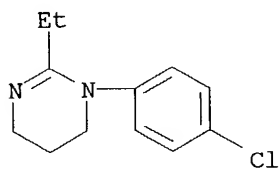
RN 224314-00-5 CAPLUS

CN Pyrimidine, 1-(4-chlorophenyl)-1,4,5,6-tetrahydro-2-methyl- (9CI) (CA INDEX NAME)



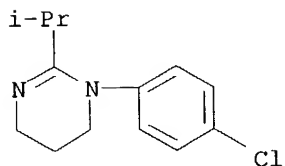
RN 224314-01-6 CAPLUS

CN Pyrimidine, 1-(4-chlorophenyl)-2-ethyl-1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)



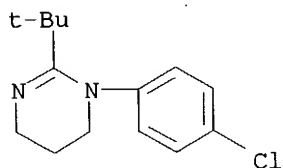
RN 224314-02-7 CAPLUS

CN Pyrimidine, 1-(4-chlorophenyl)-1,4,5,6-tetrahydro-2-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 224314-03-8 CAPLUS

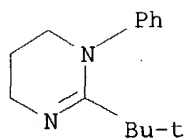
CN Pyrimidine, 1-(4-chlorophenyl)-2-(1,1-dimethylethyl)-1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)



RN 224314-04-9 CAPLUS

CN Pyrimidine, 2-(1,1-dimethylethyl)-1,4,5,6-tetrahydro-1-phenyl- (9CI) (CA INDEX NAME)





RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 24 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1999:65364 CAPLUS  
 DN 130:183905  
 TI Curable compositions containing mercapto compounds and unsaturated  
 compounds catalyzed by tertiary amines  
 IN Nakamura, Masataka; Henmi, Masahiro  
 PA Toray Industries, Inc., Japan  
 SO Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

*Same as  
#21*

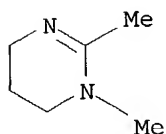
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11021352	A2	19990126	JP 1997-178386	19970703
PRAI	JP 1997-178386		19970703		

AB The compns., useful for coatings, adhesives, sealants, etc., comprise (A) compds. bearing  $\geq 2$  SH groups, (B) compds. having  $\geq 2$  C:C bonds, and (C) tertiary amines having amidine structures except for 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU). Thus, a composition containing NK Ester

A 400 15.2, Light Acrylate TMP-6EO-3A 1.2, N-nitrosophenylhydroxylamine Al salt 0.1, and 1,5-diazabicyclo[4.3.0]non-5-ene 1.0 part was mixed with 100 parts Thiokol LP 56 and left for 5 h to give a cured product showing no tackiness.

IT **4271-96-9**, 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine  
**220582-96-7**  
 RL: CAT (Catalyst use); USES (Uses)  
 (crosslinking catalysts; curable compns. for coatings, sealants, and adhesives containing mercapto compds. and unsatd. compds. catalyzed by tertiary amines)

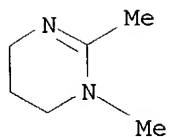
RN 4271-96-9 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 220582-96-7 CAPLUS  
 CN Phenol, compd. with 1,4,5,6-tetrahydro-1,2-dimethylpyrimidine (9CI) (CA INDEX NAME)

CM 1

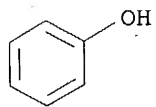
CRN 4271-96-9  
 CMF C6 H12 N2



CM 2

CRN 108-95-2

CMF C6 H6 O



L18 ANSWER 25 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:651065 CAPLUS

DN 129:317086

TI One-component-type curable compositions containing mercapto compounds

IN Nakamura, Masataka; Henmi, Masahiro

PA Toray Industries, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

*Same as #21*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10265612	A2	19981006	JP 1997-69636	19970324
PRAI	JP 1997-69636		19970324		

AB The title compns. contain compds. having protected mercapto groups and compds. having  $\geq 2$  C-C double bonds in a mol. The compns. are cured by the addition reactions of mercapto groups with C-C double bonds and useful for coatings, adhesives, sealing compns., etc. Thus, polysulfides (a mixture of Thiokol LP 56 and LP 3) were trimethylsilylated with hexamethyldisilazane and 100.0 parts of the resulting trimethylsilyl derivs. were mixed with 10.0 parts polyethylene glycol diacrylate (NK Ester A 400), 10.0 parts ethylene oxide-modified trimethylolpropane triacrylate (Light Acrylate TMP 6EO3A), N-nitrosophenylhydroxylamine Al salt, and 1,8-diazabicyclo[5.4.0]undecene-7 under N and sealed in an Al tube. The composition was cured within 1 day after extruding on a paper plate at 20° and relative humidity 70%.

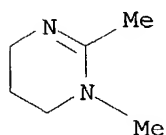
IT 4271-96-9, 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine

RL: CAT (Catalyst use); USES (Uses)

(catalyst; one-component-type curable compns. containing mercapto compds. and vinyl compds.)

RN 4271-96-9 CAPLUS

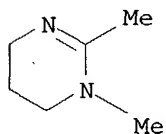
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L18 ANSWER 26 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1998:594504 CAPLUS  
 DN 129:261366  
 TI Thiourethanation catalysts and curing compositions using the same, showing  
 no foaming during the thiourethanation or curing reaction  
 IN Nakamura, Masataka; Henmi, Masahiro  
 PA Toray Industries, Inc., Japan  
 SO Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1  

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10235200	A2	19980908	JP 1997-81546	19970331
PRAI	JP 1996-348489		19961226		

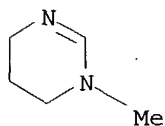
AB The title catalysts have amidine structure. Pr isocyanate and  
 1-dodecanethiol showed quant. thiourethanation in the presence of DBU.  
 IT **4271-96-9**, 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine  
 RL: CAT (Catalyst use); USES (Uses)  
 (thiourethanation catalysts and curing compns. using the same, showing  
 no foaming during the thiourethanation or curing reaction)  
 RN 4271-96-9 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX  
 NAME)



*Same as  
#21*

L18 ANSWER 27 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1998:485980 CAPLUS  
 DN 129:169730  
 TI Synthesis of cis- and trans-dichloro(dimethylphenylphosphine)(1-methyl-1,4,5,6-tetrahydropyrimidine)platinum(II) and their spectral and structural characterization  
 AU Cetinkaya, Bekir; Ozdemir, Ismail; Tahir, M. Nawaz; Ulku, Dincer  
 CS Department of Chemistry, Inonu University, Malatya, 44069, Turk.  
 SO Journal of Organometallic Chemistry (1998), 561(1-2), 7-11  
 CODEN: JORCAI; ISSN: 0022-328X  
 PB Elsevier Science S.A.  
 DT Journal  
 LA English  
 AB Interaction of  $[Pt(\mu-Cl)Cl(PMe_2Ph)]_2$  with 1-methyl-1,4,5,6-tetrahydropyrimidine (L) in boiling toluene produced a mixture of cis- and trans- $[PtCl_2(PMe_2Ph)L]$  (I); trans-I isomerizes to give thermodynamically more stable cis-I in boiling EtOH. Spectroscopic and x-ray diffraction data permit generalizations about cis- and trans- isomeric pairs to be made. The trans influence of the ligand L is reliably assessed.  
 IT **2304-03-2**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (for preparation of platinum 1-methyl-1,4,5,6-tetrahydropyrimidine phosphine isomeric complexes)  
 RN 2304-03-2 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

*Same as #22*



RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 28 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1997:733048 CAPLUS  
 DN 127:347703  
 TI Polyurethane powder coatings with low stoving temperature and high  
 adhesion  
 IN Laas, Hans Josef; Meier-Westhues, Hans-Ulrich; Halpaap, Reinhard;  
 Freudenberg, Ulrich; Klee, Hans-Peter  
 PA Bayer A.-G., Germany  
 SO Ger. Offen., 10 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

*Same as #21*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19616496	A1	19971030	DE 1996-19616496	19960425
	US 5847044	A	19981208	US 1997-834799	19970403
	EP 803524	A1	19971029	EP 1997-106063	19970414
	EP 803524	B1	20031126		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
	AT 255135	E	20031215	AT 1997-106063	19970414
	ES 2210410	T3	20040701	ES 1997-106063	19970414
	CA 2203229	AA	19971025	CA 1997-2203229	19970421
	JP 10046055	A2	19980217	JP 1997-118621	19970423
	NO 9701886	A	19971027	NO 1997-1886	19970424
PRAI	DE 1996-19616496	A	19960425		

OS MARPAT 127:347703

AB Powder coating compns. for application to heat-resistant substrates  
 comprise (A) a binder component with OH number 25-200 and mol. weight  
 400-10,000

which is solid at  $<40^{\circ}$  and liquid at  $>130^{\circ}$ , (B) a  
 (cyclo)aliphatic polyisocyanate adduct containing uretedione moieties and  
 optionally free NCO groups which is solid at  $<40^{\circ}$  and liquid at  
 $>125^{\circ}$ , (C) a N,N,N'-trisubstituted amidine as catalyst, and  
 optionally (D) other conventional catalysts and additives in such amts.  
 that there are 0.6-1.4 NCO groups (free or masked in uretedione links) in  
 B for each OH group in A and the weight ratio  $C/(A + B + C + D) =$   
 0.0005-0.05. These coatings are more environmentally acceptable than  
 those in which NCO-blocking agents are volatilized during curing. Thus, a  
 B component with m.p.  $82-83^{\circ}$ , free NCO content 0.7%, and total NCO  
 content 12.8% was prepared by reaction of 4.3 equiv uretedione-containing IPDI  
 polymer with 3.4 equiv 1,4-butanediol-caprolactone adduct (average mol. weight  
 269) and 0.9 equiv 2-ethylhexanol. A powder coating from this B component  
 14.3, a polyester (OH number 50, m.p.  $55-60^{\circ}$ , from terephthalic acid  
 66.6, neopentyl glycol 38.2, 1,6-hexanediol 5.3, and trimethylolpropane  
 4.5 parts) 49.2, Perenol F 30P (processing aid) 1.5, TiO<sub>2</sub> pigment 35.0,  
 and 1,2-dimethyltetrahydropyrimidine (I) 1 part showed gel time 18 s at  
 $180^{\circ}$ , compared with 380 s when I was omitted.

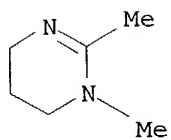
IT 4271-96-9, 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine

RL: CAT (Catalyst use); USES (Uses)

(curing catalyst; polyurethane powder coatings with low stoving temperature  
 and high adhesion)

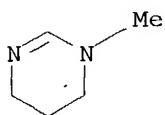
RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX  
 NAME)





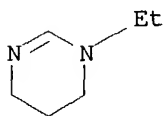
L18 ANSWER 29 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1997:702765 CAPLUS  
 DN 127:358921  
 TI Oxidative cleavage of metal carbene complexes by iodine  
 AU Liu, Shiuh-Tzung; Ku, Rong-Zhi; Liu, Chung-Yuan; Kang, Fu-Mei  
 CS Dep. Chemistry, National Taiwan Univ., Taipei, 106, Taiwan  
 SO Journal of Organometallic Chemistry (1997), 543(1-2), 249-250  
 CODEN: JORCAI; ISSN: 0022-328X  
 PB Elsevier  
 DT Journal  
 LA English  
 OS CASREACT 127:358921  
 AB Oxidative cleavage of cyclic diamino-substituted Group VI metal carbene complexes, e.g. I, with iodine under thermal conditions provides imidazolidin-2-ylidinium iodides and the related six-membered derivs. in moderate to good yields.  
 IT **198495-01-1P 198495-02-2P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 198495-01-1 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-, monohydriodide (9CI) (CA INDEX NAME)



*Same as # 22*

● HI

RN 198495-02-2 CAPLUS  
 CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-, monohydriodide (9CI) (CA INDEX NAME)



● HI

RE.CNT 6      THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 30 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:699221 CAPLUS

DN 127:358864

TI Preparation of N'-methylcycloamidinium salts

IN Takeda, Masayuki; Ue, Makoto; Takahashi, Takako; Takehara, Masahiro

PA Mitsubishi Chemical Industries Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

*Same as #21*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09278759	A2	19971028	JP 1996-83588	19960405
PRAI	JP 1996-83588		19960405		
OS	MARPAT 127:358864				

AB The title compds., useful as surfactants, electrolytes for condensers, phase-transfer catalysts, etc., are prepared in high purity by treatment of cycloamidines with Me<sub>2</sub>CO<sub>3</sub>, followed by removal of unreacted cycloamidines using a mixture of (a) MeOH and (b) an organic solvent which is a poor solvent for the resulting Me N'-methylcycloamidinium carbonates but a good solvent for the cycloamidines and treatment of the separated MeOH layer containing Me N'-methylcycloamidinium carbonates with organic or inorg. acids. A mixture of 1-ethyl-2-methylimidazoline (I), Me<sub>2</sub>CO<sub>3</sub>, and MeOH was autoclaved at 120° for 12 h and the reaction mixture was concentrated to give a product mainly containing Me 1-ethyl-2,3-dimethylimidazolinium carbonate. The product was extracted with Et<sub>2</sub>O 4 times, and the extraction residue was diluted with

MeOH

then treated with phthalic acid to give 85% 1-ethyl-2,3-dimethylimidazolinium hydrogen phthalate containing ≤1% I.

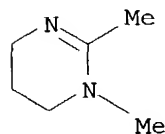
IT 4271-96-9, 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of methylcycloamidinium salts by reaction of cycloamidines with Me<sub>2</sub>CO<sub>3</sub>, purification of Me cycloamidinium carbonates, and salt exchange)

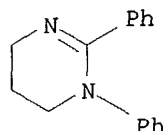
RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

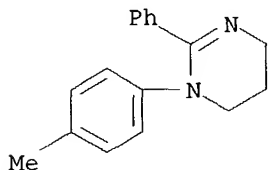


L18 ANSWER 31 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1997:546917 CAPLUS  
 DN 127:205240  
 TI Mass spectra of cyclic amidines and their salts. Part II. 2-Aryl and 1,2-diaryl-1,4,5,6-tetrahydropyrimidines and their corresponding methiodides  
 AU Orelli, Liliana R.; Hedrera, Monica E.; Perillo, Isabel A.  
 CS Departamento de Quimica Organica, Facultad de Farmacia y Bioquimica, Universidad de Buenos Aires, Capital Federal Buenos Aires, 1113, Argent.  
 SO Instrumentation Science & Technology (1997), 25(3), 207-216  
 CODEN: ISCTEF; ISSN: 1073-9149  
 PB Dekker  
 DT Journal  
 LA English  
 AB Mass spectra of a series of 2-mono- and 1,2-disubstituted 1,4,5,6-tetrahydropyrimidines (1) and their methiodides (2) under electron impact (EI) are analyzed. A typical fragmentation pattern was found for each series of compds. One of the fragmentation routes proposed for compds. 1 was confirmed by high resolution techniques. A fast atom bombardment (FAB+) technique was employed in order to detect 2 mol. ions. The chemical ionization (CI) spectrum of a methiodide is also analyzed.  
 IT 52289-23-3, 1,2-Diphenyl-1,4,5,6-tetrahydropyrimidine  
 52289-28-8 52289-36-8 134221-87-7  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
 (mass spectra of 1,4,5,6-tetrahydropyrimidine derivs. as cyclic amidines and of their methiodides)  
 RN 52289-23-3 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-diphenyl- (9CI) (CA INDEX NAME)

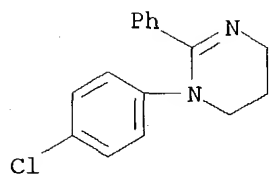
*Same as # 46*



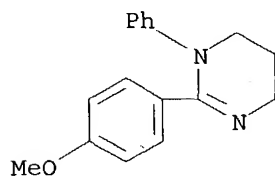
RN 52289-28-8 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-(4-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)



RN 52289-36-8 CAPLUS  
 CN Pyrimidine, 1-(4-chlorophenyl)-1,4,5,6-tetrahydro-2-phenyl- (9CI) (CA INDEX NAME)



RN 134221-87-7 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-2-(4-methoxyphenyl)-1-phenyl- (9CI) (CA  
 INDEX NAME)



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 32 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:505971 CAPLUS

DN 127:191121

TI Synthesis and characterization of N-substituted 1,4,5,6-tetrahydropyrimidine containing functional polymers as SO<sub>2</sub> and CO<sub>2</sub> sorbents

AU Seckin, Turgay; Alici, Bulent; Cetinkaya, Engin; Ozdemir, Ismail  
CS Faculty Arts Sciences, Chemistry Department, Inonu University, Malatya, 44069, Turk.

SO Journal of Polymer Science, Part A: Polymer Chemistry (1997), 35(12), 2411-2420

CODEN: JPACEC; ISSN: 0887-624X

PB Wiley

DT Journal

LA English

AB Novel vinyl monomers containing 1,4,5,6-tetrahydropyrimidine were prepared by the reaction of N-substituted-1,3-diaminopropane with N,N-dimethylformamide dimethylacetal, which gave 1-alkyl or aryl substituted 1,4,5,6-tetrahydropyrimidines. Alkylation of the tetrahydropyrimidine derivs. by chloromethylstyrene produces the N-methyl-N'-vinylbenzyl-1,4,5,6-tetrahydropyrimidinium chloride in high yields. These monomers were readily polymerized in DMF by AIBN at 80°C. Homopolymers and soluble linear copolymers were prepared and copolymn. parameters were rationalized. Insol. terpolymers prepared from these monomers, styrene and divinylbenzene were tested for the sorption of the weakly acidic gases and gave excellent results.

IT 2304-03-2P 187149-87-7P

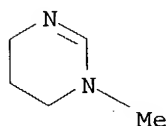
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate for monomer; synthesis and characterization of

N-substituted 1,4,5,6-tetrahydropyrimidine-containing functional polymers as SO<sub>2</sub> and CO<sub>2</sub> sorbents)

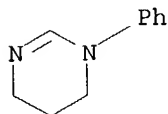
RN 2304-03-2 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 187149-87-7 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-phenyl- (9CI) (CA INDEX NAME)



L18 ANSWER 33 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:256845 CAPLUS

DN 126:245709

TI Electrolytic solution using solvent containing dialkylimidazolidinone and electrolytic capacitor

IN Nitsuta, Yukihiro; Mori, Yoshuki; Serikawa, Hiroshi

PA Matsushita Electric Ind Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09045587	A2	19970214	JP 1995-193049	19950728
PRAI	JP 1995-193049		19950728		

AB The solution contains solvents containing 1,3-dialkyl-2-imidazolidinone (alkyl

= C<sub>2</sub>) and an organic acid salt as electrolyte. The solution is used in an electrolytic capacitor showing prevention of deformation under heat stress in surface mounting.

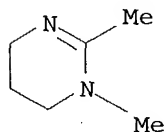
IT **4271-96-9**, 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine

RL: TEM (Technical or engineered material use); USES (Uses)

(electrolyte; electrolytic solution containing dialkylimidazolidinone for capacitor showing prevention of deformation in surface mounting)

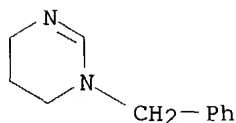
RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

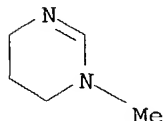
*Same as #21*

L18 ANSWER 34 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1997:97576 CAPLUS  
 DN 126:171551  
 TI Synthesis and properties of 1-substituted 1,4,5,6-tetrahydropyrimidines  
 AU Alici, Bulent; Cetinkaya, Engin; Cetinkaya, Bekir  
 CS Inonu Univ., Malatya, 44069, Turk.  
 SO Heterocycles (1997), 45(1), 29-36  
 CODEN: HTCYAM; ISSN: 0385-5414  
 PB Japan Institute of Heterocyclic Chemistry  
 DT Journal  
 LA English  
 AB The condensation of 1-substituted 1,3-diaminopropane with  
 N,N-dimethylformamide dimethylacetal gives 1-alkyl- or  
 1-aryl-1,4,5,6-tetrahydropyrimidines. Alkylation of the  
 tetrahydropyrimidine derivs. with alkyl halides produces the  
 1,3-dialkyltetrahydropyrimidinium salts. The attempted dehydrogenation of  
 1-alkyl-1,4,5,6-tetrahydropyrimidine with sulfur leads to insertion of  
 sulfur on the mol.  
 IT 1602-94-4P 2304-03-2P 182947-47-3P  
 182947-49-5P 187149-87-7P 187149-90-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of substituted tetrahydropyrimidines)  
 RN 1602-94-4 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

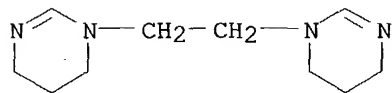
*Same*  
*as # 22*



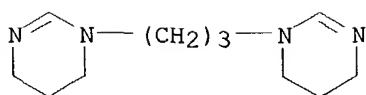
RN 2304-03-2 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 182947-47-3 CAPLUS  
 CN Pyrimidine, 1,1'-(1,2-ethanediyl)bis[1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)]



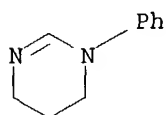
RN 182947-49-5 CAPLUS  
 CN Pyrimidine, 1,1'-(1,3-propanediyl)bis[1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)]



*p*

RN 187149-87-7 CAPLUS

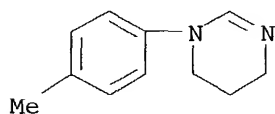
CN Pyrimidine, 1,4,5,6-tetrahydro-1-phenyl- (9CI) (CA INDEX NAME)



✓

RN 187149-90-2 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-(4-methylphenyl)- (9CI) (CA INDEX NAME)

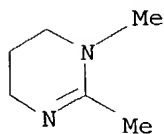


✓

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT



L18 ANSWER 35 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1996:657101 CAPLUS  
DN 126:31488  
TI Antibody Catalyzed Terpenoid Cyclization  
AU Hasserodt, Jens; Janda, Kim D.; Lerner, Richard A.  
CS Department of Molecular Biology, Scripps Research Institute, La Jolla, CA, 92037, USA  
SO Journal of the American Chemical Society (1996), 118(46), 11654-11655  
CODEN: JACSAT; ISSN: 0002-7863  
PB American Chemical Society  
DT Journal  
LA English  
AB This communication reports the discovery of a catalytic antibody that exclusive produces two regioisomeric cyclohexene derivs. from the linear substrate (5E)-5-methylhept-5-enyl-4-(acetylamino)phenylsulfonate. The antibody was elicited against a tetrahydropyrimidinium derivative that mimics the transition-state of this cationic cyclization reaction. The olefinic nature of the products as opposed to the alc. cyclohexyl derivs. formed in the uncatalyzed reaction shows the ability of the antibody to exclude water from the catalytic site. The olefinic abzyme products obtained are in close accordance to products seen with natural terpene cyclases.  
IT **184532-88-5P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of catalytic antibody hapten for terpenoid cyclization)  
RN 184532-88-5 CAPLUS  
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)

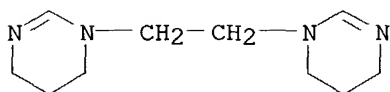


*Same as #21*

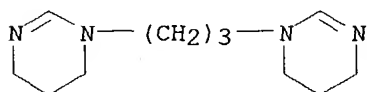
● HCl

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

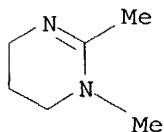
L18 ANSWER 36 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1996:577408 CAPLUS  
 DN 125:276744  
 TI Synthesis and radical polymerization of novel vinyl monomers having a  
 imidazoline and pyrimidine moiety  
 AU Seckin, Turgay; Alici, Bulent; Cetinkaya, Engin; Ozdemir, Ismail  
 CS Fac. Art Sci. Chem., Inonu Univ., Malatya, TR-44069, Turk.  
 SO Polymer Bulletin (Berlin) (1996), 37(4), 443-450  
 CODEN: POBUDR; ISSN: 0170-0839  
 PB Springer  
 DT Journal  
 LA English  
 AB Alkylation of the methylene-bridged tetrahydropyrimidine derivs. by  
 chloromethylstyrene produces bridged bis(4-vinylbenzyl)-1,4,5,6-  
 tetrahydropyriminium salts in high yields. Similar procedures are used  
 to prepare 2-imidazolinium derivs. The quaternary salts which support  
 functional side groups of potential biomedical interest are characterized  
 by spectroscopic methods. These monomers are readily polymerized free  
 radically in DMF solution at moderate temps. The soluble and insol. polymers  
 containing 2-imidazolinium and 1,4,5,6-tetrahydropyrimidinum salts exhibited  
 antibacterial activities against Escherichia coli.  
 IT **182947-47-3 182947-49-5**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and polymerization of vinyl monomers having a imidazoline or  
 pyrimidine moiety)  
 RN 182947-47-3 CAPLUS  
 CN Pyrimidine, 1,1'-(1,2-ethanediyl)bis[1,4,5,6-tetrahydro- (9CI) (CA INDEX  
 NAME)



RN 182947-49-5 CAPLUS  
 CN Pyrimidine, 1,1'-(1,3-propanediyl)bis[1,4,5,6-tetrahydro- (9CI) (CA INDEX  
 NAME)



L18 ANSWER 37 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1996:238768 CAPLUS  
DN 124:335239  
TI Corrositex evaluation on amino compound and pyridino compound  
AU Nakano, Yumuko  
CS Osaka Prefectural Institute Public Health, Osaka, Japan  
SO Osaka-furitsu Koshu Eisei Kenkyusho Kenkyu Hokoku, Rodo Eisei Hen (1995),  
33, 25-7  
CODEN: OFKIAR; ISSN: 0475-0675  
PB Osaka-furitsu Koshu Eisei Kenkyusho  
DT Journal  
LA Japanese  
AB The corrositex of 3-methoxypropylamine, N,N,N',N'-tetramethyl-1,3-  
diaminopropane, 1,2-dimethyl-1,4,5,6-tetrahydropyrimidine,  
2-methylpiperazine, 3-lauryloxypropimeamine, 2,5-dimethylpyrazine,  
3,4-lutidine, 4-hydroxypyridine, and 3-aminomethylpyridine were determined  
IT **4271-96-9**, 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine  
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(corrositex of amino compds. and pyridino compds.)  
RN 4271-96-9 CAPLUS  
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX  
NAME)



*Same  
as #21*

L18 ANSWER 38 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:153940 CAPLUS

DN 124:218018

TI Electrolytic capacitor and driving solution containing in-situ formed tertiary nitrogen compound

IN Nitsuta, Yukihiro; Fujiwara, Naomi; Ushio, Noriki

PA Matsushita Electric Ind Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07335495	A2	19951222	JP 1994-125079	19940607
PRAI	JP 1994-125079		19940607		

AB The solution comprises a tertiary N compound formed by mixing a compound containing

$\geq 2$  N atoms and an acid in a solvent. The N-atomic-containing compound may be an azo heterocyclic compound and the acid may be maleic acid, phthalic acid, adipic acid, benzoic acid, and/or their derivs. The capacitor using the electrolyte solution is also claimed. The electrolyte solution causes no corrosion of Al leads in the capacitor.

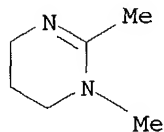
IT 4271-96-9, 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine

RL: DEV (Device component use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)

(electrolytic capacitor and electrolyte containing in situ formed ternary nitrogen compound)

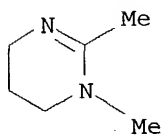
RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



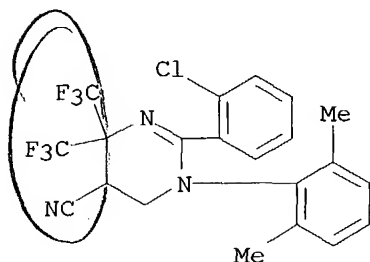
*Same as  
#21*

L18 ANSWER 39 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1995:704597 CAPLUS  
 DN 123:285892  
 TI Synthesis and nematocidal activities of new analogs of pyrantel  
 AU Kraouti, N.; Caujolle, R.; Labidalle, S.; Payard, M.; Loiseau, P. M.;  
 Bories, C.; Gayral, P.  
 CS Dep. chimie, Faculte pharmacie, Toulouse, 31062, Fr.  
 SO European Journal of Medicinal Chemistry (1995), 30(6), 509-13  
 CODEN: EJMCA5; ISSN: 0223-5234  
 PB Elsevier  
 DT Journal  
 LA English  
 AB A set of new analogs of pyrantel [(E)-Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethenyl]pyrimidine] was synthesized in good yields by lithiation of 1,2-dimethyltetrahydropyrimidine with n-butyllithium in THF and condensation with aromatic esters. Spectrometric studies showed the large influence of intramol. bonding in the tautomeric equilibrium between the possible structures. Structures were determined to be consistent with the presence of 1-phenyl-2-(tetrahydro-1-methyl-2(1H)-pyrimidinylidene)ethanone. Anthelmintic screening showed in vitro efficiency against *Molinema dessatae*, but a weak activity against *Rhabditis pseudoelongata* and *Nippostrongylus brasiliensis*.  
 IT 4271-96-9, Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and nematocidal activity of pyrantel analogs)  
 RN 4271-96-9 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

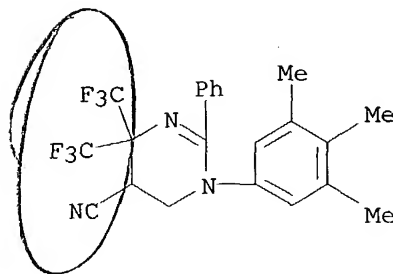


Same as #21

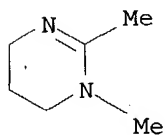
L18 ANSWER 40 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1995:531727 CAPLUS  
 DN 123:143791  
 TI Reactions of 4,4-bis(trifluoromethyl)-1,3-diazabuta-1,3-dienes. Synthesis of trifluoromethyl substituted heterocycles via Baylis-Hillman reaction  
 AU Cyrener, J.; Burger, K.  
 CS Inst. Organische Chemie, Universitaet Leipzig, Leipzig, D-04103, Germany  
 SO Monatshefte fuer Chemie (1995), 126(3), 319-31  
 CODEN: MOCMB7; ISSN: 0026-9247  
 PB Springer  
 DT Journal  
 LA German  
 AB 4,4-Bis(trifluoromethyl)-1,3-diazabuta-1,3-dienes and  $\alpha,\beta$ -unsatd. heteromultiple bond systems react to give bis(trifluoromethyl) substituted heterocycles. The first step of the formal [4+2]cycloaddn. represents a Baylis-Hillman reaction. The Baylis-Hillman reaction of 2-chloro-N'-(2,6-dimethylphenyl)-N-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]benzenecarboximidamide (I) with 2-propenal gave the tetrahydropyrimidinecarboxaldehyde II.  
 IT **166411-10-5P 166411-11-6P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (Baylis-Hillman reaction of alkenes with N-[trifluoro(trifluoromethyl)ethylidene]amine)  
 RN 166411-10-5 CAPLUS  
 CN 5-Pyrimidinecarbonitrile, 2-(2-chlorophenyl)-1-(2,6-dimethylphenyl)-1,4,5,6-tetrahydro-4,4-bis(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 166411-11-6 CAPLUS  
 CN 5-Pyrimidinecarbonitrile, 1,4,5,6-tetrahydro-2-phenyl-4,4-bis(trifluoromethyl)-1-(3,4,5-trimethylphenyl)- (9CI) (CA INDEX NAME)



L18 ANSWER 41 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1995:58224 CAPLUS  
 DN 122:31445  
 TI Synthesis and nematocidal activity of arylmercaptovinyltetrahydropyrimidin  
 es  
 AU Kraouti, Naceur; Labidalle, Serge; Caujolle, Raymong; Payard, Marc;  
 Bories, Christian; Loiseau, Philippe M.; Gayral, Philippe  
 CS Departement Chimie, Faculte Pharmacie, Toulouse, 31400, Fr.  
 SO Farmaco (1994), 49(5), 371-3  
 CODEN: FRMCE8; ISSN: 0014-827X  
 DT Journal  
 LA English  
 AB A set of mercaptovinyl tetrahydropyrimidines was synthesized in good  
 yields by lithiation of 1,2-dimethyltetrahydropyrimidine with Bu lithium  
 in THF, followed by condensation with aromatic thioesters. Against three  
 nematode genera, anthelmintic screening shows little activity; I [Ar =  
 4-chlorophenyl, 4-methoxyphenyl] were the most potent against *Molinema*  
*dessetae*.  
 IT 4271-96-9, 1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant; synthesis and nematocidal activity of  
 arylmercaptovinyltetrahydropyrimidines)  
 RN 4271-96-9 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX  
 NAME)



*Same  
as #21*

L18 ANSWER 42 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1994:334774 CAPLUS  
 DN 120:334774  
 TI Method for processing silver halide photographic material  
 IN Nakamura, Koichi; Yabuki, Yoshiharu  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Eur. Pat. Appl., 78 pp.  
 CODEN: EPXXDW

DT Patent  
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 565023	A1	19931013	EP 1993-105601	19930405
	EP 565023	B1	19980701		
	R: DE, FR, GB, NL				
	JP 05303185	A2	19931116	JP 1992-112377	19920406
	JP 2958589	B2	19991006		
	US 5380626	A	19950110	US 1993-42800	19930406
PRAI	JP 1992-112377	A	19920406		
OS	MARPAT 120:334774				

AB A method for forming an image in a Ag halide color photog. material comprising a support having thereon  $\geq 1$  light-sensitive Ag halide emulsion layer comprises image-wise exposing the Ag halide color photog. material, color developing the exposed material and then subjecting the developed material to a desilverization treatment, wherein the desilverization treatment is carried out using a processing solution having a bleaching ability and containing  $\geq 1$  of an amidine compound or a bisguanidine compound and a ferric salt of an organic acid. In another method processing is addnl. carried out in the presence of a stilbene fluorescent brightener using a desilverization bath containing 1 of an amidine compound or

a bisguanidine compound The method produces less stain and less wash liquid

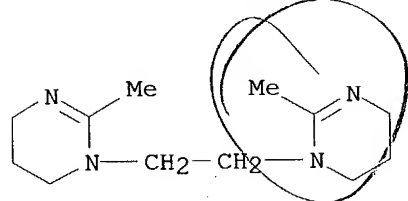
IT **83613-32-5 155466-76-5**

RL: USES (Uses)

(in photog. processing)

RN 83613-32-5 CAPLUS

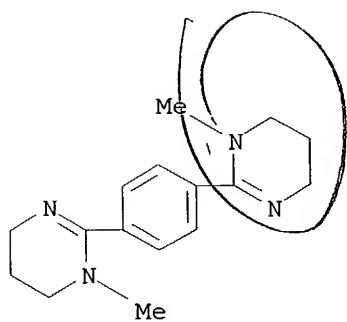
CN Pyrimidine, 1,1'-(1,2-ethanediyl)bis[1,4,5,6-tetrahydro-2-methyl- (9CI)  
 (CA INDEX NAME)



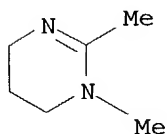
RN 155466-76-5 CAPLUS

CN Pyrimidine, 2,2'-(1,4-phenylene)bis[1,4,5,6-tetrahydro-1-methyl- (9CI)  
 (CA INDEX NAME)





L18 ANSWER 43 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1994:244942 CAPLUS  
DN 120:244942  
TI Synthesis and nematocidal activities of arylvinyltetrahydropyrimidines  
AU Kraouti, N.; Caujolle, R.; Labidalle, S.; Payard, M.; Bories, C.; Loiseau, P. M.; Gayral, P.  
CS Dep. Chim., Fac. Pharm., Toulouse, 31400, Fr.  
SO European Journal of Medicinal Chemistry (1993), 28(12), 979-82  
CODEN: EJMCA5; ISSN: 0223-5234  
DT Journal  
LA English  
AB Cyclocondensation reaction of MeC(:NH2+)OEt Cl- with NH2CH2CH2CH2NHMe gave 75% 1,2-dimethyl-1,4,5,6-tetrahydropyrimidine (I, R = Me) which on condensation with aromatic aldehydes gave title compds. I (R = ArCH:CH; Ar = aryl). The prepared compds. were screened for anthelmintic activity.  
IT **4271-96-9P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and condensation reaction of, with aromatic aldehydes)  
RN 4271-96-9 CAPLUS  
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



*Same as #21*

L18 ANSWER 44 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1993:139862 CAPLUS  
 DN 118:139862  
 TI Preparation of pyridine and pyrimidine derivatives as muscarinic agonists  
 IN Dunbar, Philip G.; Durant, Graham J.; Hoss, Wayne P.; Messer, William S., Jr.  
 PA University of Toledo, USA  
 SO U.S., 19 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5175166	A	19921229	US 1991-750504	19910827
	CA 2113424	AA	19930304	CA 1992-2113424	19920812
	CA 2113424	C	20031111		
	WO 9303726	A1	19930304	WO 1992-US6842	19920812
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
	JP 06510287	T2	19941117	JP 1993-504463	19920812
	JP 3411276	B2	20030526		
	EP 630244	A1	19941228	EP 1992-919345	19920812
	EP 630244	B1	19991201		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE				
	AT 187070	E	19991215	AT 1992-919345	19920812
	ES 2138977	T3	20000201	ES 1992-919345	19920812
	JP 2002047276	A2	20020212	JP 2001-175844	19920812
	JP 3519062	B2	20040412		
	US 5403845	A	19950404	US 1994-224271	19940407
PRAI	US 1991-750504	A	19910827		
	JP 1993-504463	A3	19920812		
	WO 1992-US6842	W	19920812		
	US 1992-996049	B1	19921223		

OS MARPAT 118:139862

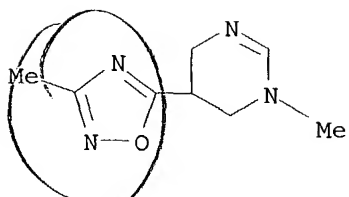
AB The title compds. I, II and III [A = H, NHR; R = H, C1-7 alkyl, COR1, CO2R1(R1 = alkyl); Z = CO2R2, AcO (R2 = Me, Et, Pr, propynyl)] are prepared as muscarinic agonists, useful for the treatment of senile or presenile dementia, Huntington's chorea, Tourette syndrome, etc.  
 2-Amino-3,4,5,6-tetrahydropyridine-5-carboxylic acid-HCl (preparation given) was suspended in anhydrous MeOH and treated with SOCl2, followed by refluxing, to give 2-amino-5-methoxycarbonyl-3,4,5,6-tetrahydropyridine-HCl (IV). IV showed high binding potency to muscarinic receptors in the rat brain in vitro, with preference to M1 receptors involved in memory and cognition.

IT **146422-23-3P 146422-48-2P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as muscarinic agonist drug)

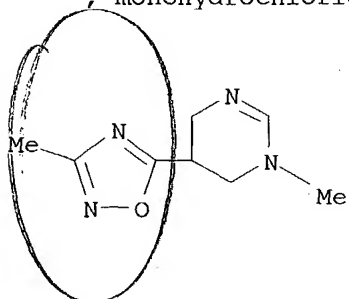
RN 146422-23-3 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-5-(3-methyl-1,2,4-oxadiazol-5-yl)-(9CI) (CA INDEX NAME)



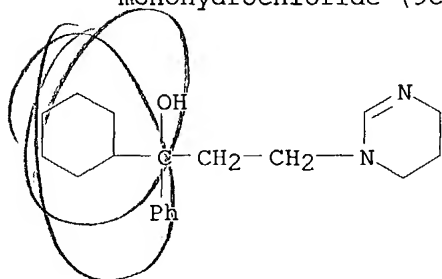
RN 146422-48-2 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-5-(3-methyl-1,2,4-oxadiazol-5-yl)-  
, monohydrochloride (9CI) (CA INDEX NAME)



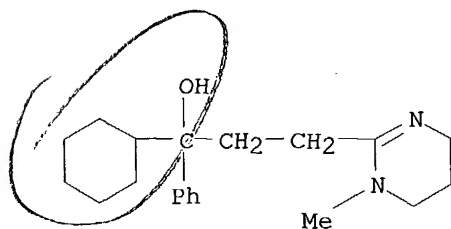
● HCl

L18 ANSWER 45 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:536037 CAPLUS  
 DN 115:136037  
 TI Synthesis and biological evaluation of new muscarinic receptor antagonists bearing cyclic amidines as cationic heads  
 AU Nicola, Massimo; Schiavi, Giovanni Battista; Micheletti, Rosella; Donetti, Arturo; Ladinsky, Herbert; Turconi, Marco  
 CS Ist. Angeli, Milan, 20139, Italy  
 SO Farmaco (1991), 46(4), 539-53  
 CODEN: FRMCE8; ISSN: 0014-827X  
 DT Journal  
 LA English  
 AB Imidazole and pyrimidine derivs. I ( $R = H, n = 0, 1, m = 1, 2; R = Me, n = 0, m = 1, 2$ ) and II ( $R = H, R_1 = H, Me, n = 0-2; R = Me, R_1 = H, n = 1$ ) were synthesized and evaluated as muscarinic receptor antagonists. Thus, condensation of  $ClCH_2CH_2C(OH)PhR_2$  ( $R_2 = \text{cyclohexyl}$ ) with pyrimidine III gave I ( $R = H, n = m = 1$ ). The compds. were potent muscarinic antagonists.  
 IT **123579-64-6P 123579-68-0P 123579-82-8P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and antimuscarinic activity of)  
 RN 123579-64-6 CAPLUS  
 CN 1(4H)-Pyrimidinepropanol,  $\alpha$ -cyclohexyl-5,6-dihydro- $\alpha$ -phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



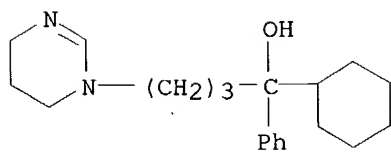
● HCl

RN 123579-68-0 CAPLUS  
 CN 2-Pyrimidinepropanol,  $\alpha$ -cyclohexyl-1,4,5,6-tetrahydro-1-methyl- $\alpha$ -phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 123579-82-8 CAPLUS  
 CN 1(4H)-Pyrimidinebutanol,  $\alpha$ -cyclohexyl-5,6-dihydro- $\alpha$ -phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

aq. NaOH soln. and worked up, and the residue (2.4 g.) dissolved in 15 ml. MeOH and the soln. treated with 1.45 g. IV to give 1-methyl-2-[2-(3-thienyl)ethyl]-1,4,5,6-tetrahydropyrimidine fumarate, m. 165-6.degree. (MeOH). I are effective against Trichostrongylus species of helminth order Strongylidae found in stomachs and intestines of sheep and cattle, and are administered at a daily rate of 1-150 mg./kg. (therapy, 1-4 days) or 1-50 mg./kg. (prophylaxis). Examples (4) of veterinary compns. are given.

IT 22827-72-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

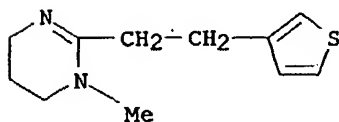
RN 22827-72-1 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(3-thienyl)ethyl]-, fumarate  
(8CI) (CA INDEX NAME)

CM 1

CRN 46328-63-6

CMF C11 H16 N2 S

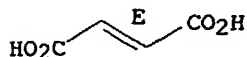


CM 2

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.



L18 ANSWER 47 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:164274 CAPLUS  
 DN 114:164274  
 TI Preparation of 4-(substituted amino)-pyrimidinium salts as cardiovascular agents  
 IN Hargreaves, Rodney Brian; Marshall, Paul William; McLoughlin, Bernard Joseph; Mills, Stuart Dennett  
 PA Imperial Chemical Industries PLC, UK  
 SO Brit. UK Pat. Appl., 77 pp.  
 CODEN: BAXXDU  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2230527	A1	19901024	GB 1990-7964	19900409
	GB 2230527	B2	19930505		
	ZA 9002753	A	19901228	ZA 1990-2753	19900410
	IL 94062	A1	19951127	IL 1990-94062	19900411
	CA 2014457	AA	19901021	CA 1990-2014457	19900412
	CA 2014457	C	19990928		
	WO 9012790	A1	19901101	WO 1990-GB595	19900419
	W: AU, BB, BG, FI, HU, JP, KR, LK, MC, MW, NO, RO, SD, SU				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
	AU 9054354	A1	19901116	AU 1990-54354	19900419
	AU 635260	B2	19930318		
	EP 422178	A1	19910417	EP 1990-906289	19900419
	EP 422178	B1	19941005		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
	HU 56080	A2	19910729	HU 1990-3555	19900419
	HU 209586	B	19940829		
	JP 03505741	T2	19911212	JP 1990-506034	19900419
	JP 2528218	B2	19960828		
	DD 297406	A5	19920109	DD 1990-339897	19900419
	ES 2064727	T3	19950201	ES 1990-906289	19900419
	RU 2108329	C1	19980410	RU 1990-4894489	19900419
	US 5223505	A	19930629	US 1990-513304	19900420
	PL 165502	B1	19941230	PL 1990-284871	19900420
	PL 165917	B1	19950331	PL 1990-301231	19900420
	CN 1047080	A	19901121	CN 1990-103931	19900421
	CN 1024793	B	19940601		
	BR 9005295	A	19920421	BR 1990-5295	19901019
	NO 9005519	A	19910220	NO 1990-5519	19901220
	NO 177054	B	19950403		
	FI 95377	B	19951013	FI 1990-6307	19901220
	FI 95377	C	19960125		
PRAI	GB 1989-9054	A	19890421		
	GB 1989-10548	A	19890508		
	WO 1990-GB595	A	19900419		

OS MARPAT 114:164274

AB The title compds. [I; R1 = alkyl, alkenyl, cycloalkyl(alkyl), phenyl(alkyl), 1 of R2, R6 = amino, pyrrolidino, piperidino, morpholino, the other = H, (alkoxy)alkyl, phenyl(alkyl), cycloalkyl(alkyl), alkenyl; R4 = H, cycloalkylalkyl, alkyl, alkenyl, alkynyl, phenylalkyl; or R4 = (substituted) alkylene or alkenylene bound to QA; R5 = H, alkyl, alkenyl; R5R6 = alkylene, atoms to complete a benzene ring; A = bond, (oxy)alkylene; Q = pyridyl, furyl, thienyl, Ph; Y = physiol. acceptable cation], were prepared Thus, a mixture of 4-chloro-2-methyl-6-



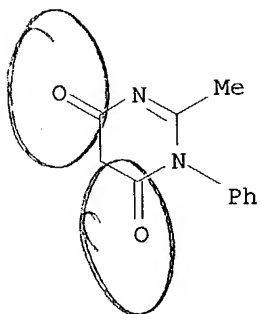
methylaminopyrimidine and PhNH<sub>2</sub> were heated at 160° for 3 h to give 2-methyl-6-methylamino-4-N-ethylanilinopyrimidine.HCl. The free base of the latter was refluxed with MeI in dioxane to give title compound II which in rats had an ED<sub>30</sub> of 0.3 mg/kg i.v. for bradycardic activity.

IT 7348-62-1

RL: RCT (Reactant); RACT (Reactant or reagent)  
(chlorination of, in preparation of bradycardic)

RN 7348-62-1 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L18 ANSWER 48 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1991:163558 CAPLUS  
 DN 114:163558  
 TI Method of obtaining cyanamide derivatives  
 IN Wlostowski, Marek; Jaworski, Tadeusz  
 PA Politechnika Warszawska, Pol.  
 SO Pol., 3 pp.  
 CODEN: POXXA7  
 DT Patent  
 LA Polish  
 FAN.CNT 1

102

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	PL 148933	B1	19891230	PL 1985-253679	19850529
PRAI	PL 1985-253679		19850529		

OS CASREACT 114:163558; MARPAT 114:163558

AB RR1NCN (I; R, R1 = alkyl, alkenyl, alkynyl, aryl, arylalkyl, arylalkenyl, arylalkynyl, (substituted) heteroaryl containing N, O, S, wherein one of R or R1 = aryl) are prepared by alkylation of R2NHCN (R2 = H, R) with R1X (X = halo, alkyl sulfate) in presence of an amidine or alkylguanine. To H2NCN in acetone was added (Me2N)2C:NH, the mixture heated to 40°, PhCH2Cl was added, the mixture refluxed at room temperature to give a precipitate from

which

(Me2N)2C:NH.HCl was removed to give I (R = R1 = PhCH2).

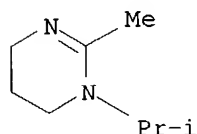
IT **78706-88-4**

RL: RCT (Reactant); RACT (Reactant or reagent)

(alkylation of (substituted) cyanamide in presence of)

RN 78706-88-4 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



L18 ANSWER 49 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1990:497624 CAPLUS

DN 113:97624

TI Preparation of 1,4,5,6-tetrahydropyrimidines from nitriles and 1,3-propanediamines

IN Yamazaki, Takeshi; Usui, Masatoshi

PA Koei Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02104577	A2	19900417	JP 1988-259827	19881014
	JP 2699181	B2	19980119		
PRAI	JP 1988-259827		19881014		

OS MARPAT 113:97624

AB 1,4,5,6-Tetrahydropyrimidines I (R1 = aliphatic, aromatic, or aryl-substituted aliphatic group; R2 - R4 = H, any group given for R1), useful as intermediates for dyes, drugs, agrochemicals, etc. and catalysts for addition reaction of isocyanates and polyols, are prepared by treatment of R1CN with R2NHCH2CHR3CHR4NH2 in the presence of  $\geq 1$  metal salts selected from Zn, Cu, Fe, Co, and Mn or in the presence of S, H2S, or their precursors. A mixture of MeNH(CH2)3NH2, MeCN, and Zn(OAc)2 was autoclaved at 200-220° under 30-35 kg/cm2 for 3.5 h to give 89% I (R1 = R2 = Me, R3 = R4 = H).

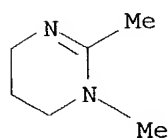
IT 4271-96-9P, 1,4,5,6-Tetrahydro-1,2-dimethylpyrimidine  
 35739-39-0P, 1,4,5,6-Tetrahydro-1-butyl-2-propylpyrimidine  
 35739-40-3P, 1,4,5,6-Tetrahydro-1-butyl-2-isopropylpyrimidine  
 41715-14-4P, 1,4,5,6-Tetrahydro-1-ethyl-2-phenylpyrimidine  
 41817-82-7P, 1,4,5,6-Tetrahydro-1-benzyl-2-methylpyrimidine

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, by cyclocondensation of nitrile with propanediamine)

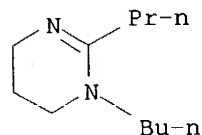
RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



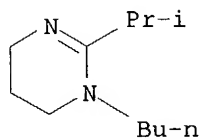
RN 35739-39-0 CAPLUS

CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-propyl- (9CI) (CA INDEX NAME)



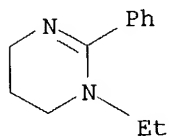
RN 35739-40-3 CAPLUS

CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-(1-methylethyl)- (9CI) (CA INDEX NAME)



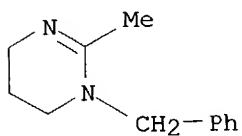
RN 41715-14-4 CAPLUS

CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-phenyl- (9CI) (CA INDEX NAME)



RN 41817-82-7 CAPLUS

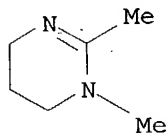
CN Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



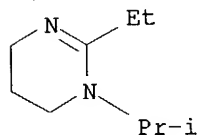
L18 ANSWER 50 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:35878 CAPLUS  
 DN 112:35878  
 TI Preparation of 1,5,6-tetrahydropyrimidines as anthelmintics  
 IN Kolaczowska, Ewa; Wlostowski, Marek; Jaworski, Tadeusz  
 PA Politechnika Warszawska, Pol.  
 SO Pol., 6 pp. Abstracted and indexed from the unexamined application.  
 CODEN: POXXA7  
 DT Patent  
 LA Polish  
 FAN.CNT 1

(102)

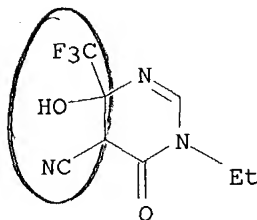
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	PL 143788	B1	19880331	PL 1985-254066	19850619
PRAI	PL 1985-254066		19850619		
OS	MARPAT 112:35878				
AB	The title compds. (I; R = alkyl, acyl, acylalkyl, C3-6 cycloalkyl optionally modified with $\geq 1$ alkoxy, OH, NH <sub>2</sub> , halo; R <sub>1</sub> = H, alkyl, acylalkyl; R <sub>2</sub> = H, alkyl) were prepared as antihelmintics (no data) by reaction of R <sub>1</sub> NHCH <sub>2</sub> CHR <sub>2</sub> CH <sub>2</sub> NH <sub>2</sub> (II) with RCN at 20-200° in the presence of a catalyst such as S, H <sub>2</sub> S, thioamide, thiourea, thiosemicarbazide, or CS <sub>2</sub> . Thus, a mixture of MeCN 4l, II (R <sub>1</sub> , R <sub>2</sub> = H) 85, and S 1.5 g was heated 6 h at 50° and then at 130° until NH <sub>3</sub> evolution stopped, to give 85% I (R = Me, R <sub>1</sub> , R <sub>2</sub> unchanged).				
IT	<b>4271-96-9P 124345-87-5P</b> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as anthelmintic)				
RN	4271-96-9 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)				



RN 124345-87-5 CAPLUS  
 CN Pyrimidine, 2-ethyl-1,4,5,6-tetrahydro-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



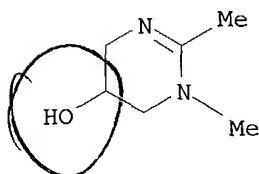
L18 ANSWER 51 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:35798 CAPLUS  
 DN 112:35798  
 TI Syntheses of trifluoromethylated pyridinones and pyrimidinones  
 AU Lee, Len F.; Sing, Y. Larry  
 CS Technol. Div., Monsanto Agric. Co., St. Louis, MO, 63167, USA  
 SO Journal of Organic Chemistry (1990), 55(1), 380-4  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA English  
 OS CASREACT 112:35798  
 AB Reaction of 1,3-diphenylacetone and cyanoacetamide with CF<sub>3</sub>CN in the presence of NaH gave the enamines H<sub>2</sub>NC(CF<sub>3</sub>):C(R)COR<sub>1</sub> [R = Ph, R<sub>1</sub> = CH<sub>2</sub>Ph (I); R = cyano, R<sub>1</sub> = NH<sub>2</sub> (II)], resp. Cyclization of I with a mixture of tri-Me orthoformate and acetic anhydride yielded 2-(trifluoromethyl)pyridinone III. Cyclization of II with a mixture of tri-Et orthoformate and acetic anhydride produced a mixture of ethylpyrimidinone IV and ethoxypyrimidine V. IV forms  $\sigma$  adducts with sodium hydroxide or sodium methoxide.  
 IT **124342-86-5P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 124342-86-5 CAPLUS  
 CN 5-Pyrimidinecarbonitrile, 1-ethyl-1,4,5,6-tetrahydro-4-hydroxy-6-oxo-4-(trifluoromethyl)-, monosodium salt (9CI) (CA INDEX NAME)



● Na

L18 ANSWER 52 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1989:632774 CAPLUS  
 DN 111:232774  
 TI Preparation of tricyclic lactams and analogs as muscarinic antagonists  
 IN Turconi, Marco; Donetti, Arturo; Cereda, Enzo; Quintero, Myrna Gil;  
 Schiavi, Giovanni Battista; Micheletti, Rosamaria  
 PA Istituto De Angeli S.p.A., Italy  
 SO Eur. Pat. Appl., 46 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 309422	A2	19890329	EP 1988-830374	19880919
	EP 309422	A3	19900110		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	DD 282689	A5	19900919	DD 1988-319831	19880915
	DK 8805226	A	19890322	DK 1988-5226	19880920
	FI 8804305	A	19890322	FI 1988-4305	19880920
	NO 8804174	A	19890322	NO 1988-4174	19880920
	JP 01132567	A2	19890525	JP 1988-236178	19880920
	AU 8822380	A1	19890323	AU 1988-22380	19880921
PRAI	IT 1987-21978	A	19870921		
OS	MARPAT 111:232774				
AB	<p>Title compds. I [R = H, halo; X = N, CH; W = NHCO, CH:CH, (CH<sub>2</sub>)<sub>2</sub>, O, S; R<sub>1</sub> = H, C1-4 alkyl; n = 0, 1; Y = S, CH; A = C, N; B = CH when A ≠ N, CO<sub>2</sub>, CO, CH<sub>2</sub>; m = 0-3; Z = NH, CO, CO<sub>2</sub>, CH, bond; p, q = 0, 1; Q = (homo)piperazinyl, piperidinyl, troyl, tetrahydroprimidinyl, the above groups may be substituted by a C1-4 alkyl or an amino; R = CR<sub>2</sub>:NR<sub>3</sub>; R<sub>2</sub> = H, C1-4 alkyl, (C1-4 alkyl- or Ph-substituted) amino; R<sub>3</sub> = C1-8 alkyl, H (provided that the bond of QR is a C-C bond or AB = C:CH); R<sub>2</sub>R<sub>3</sub> = atoms to form a 5-membered ring] are prepared for treatment of motility disorders of the gastrointestinal or urogenital tract and peptic ulcer disorders. A mixture of 5,10-dihydro-5-[2-piperazin-1-yl]acetyl]-11H-dibenzo[b,e][1,4]-diazepin-11-one and H<sub>2</sub>NC(:NH)SMe.H<sub>2</sub>SO<sub>4</sub> in EtOH was refluxed to give the 4-guanylpiperazinyl analog isolated as its 2 HCl salt. The latter salt showed a dissociation constant (K<sub>D</sub>) of 6 nM for displacement of 3H-pirenzepine from cerebral cortex homogenate of rats. Tablets were formulated containing I 20, lactose 247, cornstarch 30, and Mg stearate 3 mg.</p>				
IT	122860-76-8P				
	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction of, in preparation of muscarinic antagonists)				
RN	122860-76-8 CAPLUS				
CN	5-Pyrimidinol, 1,4,5,6-tetrahydro-1,2-dimethyl- (9CI) (CA INDEX NAME)				



L18 ANSWER 53 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1989:614499 CAPLUS  
 DN 111:214499  
 TI Preparation and formulation of nitrogen-containing heterocycles as muscarinic receptor blockers  
 IN Nicola, Massimo; Donetti, Arturo; Cereda, Enzo; Turconi, Marco; Schiavi, Giovanni Battista; Micheletti, Rosamaria  
 PA Istituto De Angeli S.p.A., Italy  
 SO Eur. Pat. Appl., 19 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 309425	A2	19890329	EP 1988-830377	19880919
	EP 309425	A3	19900627		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	SU 1676446	A3	19910907	SU 1988-4356369	19880909
	US 4973592	A	19901127	US 1988-243942	19880913
	DD 282457	A5	19900912	DD 1988-319829	19880915
	DK 8805228	A	19890322	DK 1988-5228	19880920
	FI 8804303	A	19890322	FI 1988-4303	19880920
	NO 8804175	A	19890322	NO 1988-4175	19880920
	JP 01128970	A2	19890522	JP 1988-236176	19880920
	ZA 8807002	A	19900530	ZA 1988-7002	19880920
	HU 56553	A2	19910930	HU 1988-4928	19880920
	AU 8822377	A1	19890323	AU 1988-22377	19880921
PRAI	IT 1987-21976	A	19870921		

OS MARPAT 111:214499

AB Title compds. I [R = H, (di- or trisubstituted, substituents are selected from cycloalkyl, OH, aryl, and carboxamide) C1-9 alkyl; R1 = same as R, and NHR4; R2 = H, C1-4 alkyl, R2CO2; R3 = H, C1-4 alkyl; R4 = H, (R5CO2-substituted) C1-4 alkyl; R5 = (di- or trisubstituted) Me, the substituents are selected from cycloalkyl, OH, aryl, and carboxamide; n = 0-2; at least one of R1, R2, and R3 ≠ H] are prepared, from heterocycles II (Z = S, NNO2; n = 0-2; Y = H), pyrimidines III (e.g. X = OH), and (heterocycles IV (W = leaving group; Z = halo, HSO4). A mixture of 1-phenyl-1-cyclohexyl-3-chloro-1-propanol and 3,4,5,6-tetrahydropyrimidine in DMF was heated at 75-80° to give 1-(3-phenyl-3-cyclohexyl-3-hydroxy)propyl-1,4,5,6-tetrahydropyrimidine-HCl. The latter showed 4.2 nM dissociation constant (antimuscarinic effect) for 3H-pirenzepine binding. Tablets were formulated containing I 20, lactose 247, corn starch 30, and Mg stearate 3 mg.

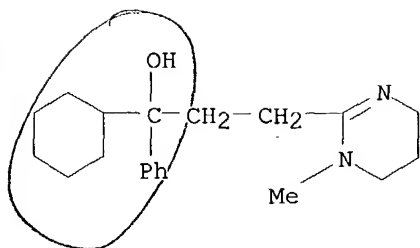
IT 123579-68-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, in preparation of muscarinic antagonist)

RN 123579-68-0 CAPLUS

CN 2-Pyrimidinepropanol,  $\alpha$ -cyclohexyl-1,4,5,6-tetrahydro-1-methyl- $\alpha$ -phenyl-, monohydrochloride (9CI) (CA INDEX NAME)





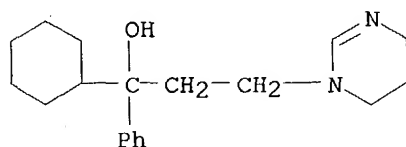
● HCl

IT 123579-64-6P 123579-82-8P 123579-84-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as muscarinic antagonist)

RN 123579-64-6 CAPLUS

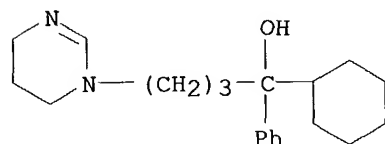
CN 1(4H)-Pyrimidinepropanol,  $\alpha$ -cyclohexyl-5,6-dihydro- $\alpha$ -phenyl-,  
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 123579-82-8 CAPLUS

CN 1(4H)-Pyrimidinebutanol,  $\alpha$ -cyclohexyl-5,6-dihydro- $\alpha$ -phenyl-,  
monohydrochloride (9CI) (CA INDEX NAME)

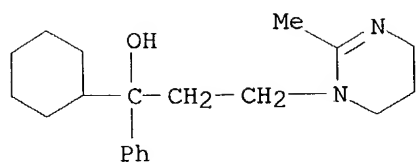


● HCl

RN 123579-84-0 CAPLUS

CN 1(4H)-Pyrimidinepropanol,  $\alpha$ -cyclohexyl-5,6-dihydro-2-methyl- $\alpha$ -  
phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

10/009,477 (RCE)



● HCl

L18 ANSWER 54 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1989:554612 CAPLUS

DN 111:154612

TI Preparation of all-aromatic thermotropic polyesters and polyester-polycarbonates

IN Pielartzik, Harald; Ebert, Wolfgang; Meyer, Rolf Volker; Traenckner, Hans Joachim; Ostlinning, Edgar

PA Bayer A.-G., Fed. Rep. Ger.

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 303931	A2	19890222	EP 1988-112882	19880808
	EP 303931	A3	19900613		
	R: DE, FR, GB, IT, NL				
	DE 3727730	A1	19890302	DE 1987-3727730	19870820
	US 4889911	A	19891226	US 1988-231071	19880811
	JP 01069624	A2	19890315	JP 1988-204837	19880819
PRAI	DE 1987-3727730	A	19870820		

AB The title polymers are prepared by esterification of p-HOC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H (I) or substituted derivs. and aromatic dicarboxylic acids with diaryl carbonates at 100-220°, transesterification with bisphenols and, optionally, other diaryl carbonates, and polymerization at 250-330° in the presence of heterocyclic compds. containing 1-3 N atoms. Heating I 322.9, hydroquinone 66, 4,4'-biphenyldiol 11.2, isophthalic acid 39.8, (PhO)<sub>2</sub>CO 707.2, and imidazole 1.45 g from 160 to 180° over 15 min, at 180° for 1 h, at 220° until CO<sub>2</sub> evolution ceased, at 250°/1 atmospheric 30 mbar for 1.5 h, and then to 300°/0.2 mbar gave a polymer with inherent viscosity 1.97 dL/g which could be injection molded at bulk

temperature

330° and mold temperature 70°.

IT **4271-96-9**, 1,4,5,6-Tetrahydro-1,2-dimethylpyrimidine

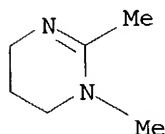
RL: CAT (Catalyst use); USES (Uses)

(catalysts, for polymerization in thermotropic polyester-polycarbonate

manufacture)

RN 4271-96-9 CAPLUS

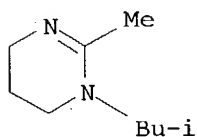
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



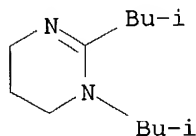
L18 ANSWER 55 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1989:553217 CAPLUS  
 DN 111:153217  
 TI Preparation of thiolchloroformates  
 IN Decker, Martin; Franzischka, Wolfgang; Wache, Harro; Franz, Dieter  
 PA BASF A.-G., Fed. Rep. Ger.  
 SO Ger. Offen., 5 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

102

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3731812	A1	19890330	DE 1987-3731812	19870922
	EP 309844	A1	19890405	EP 1988-115298	19880917
	EP 309844	B1	19911204		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL				
	AT 70049	E	19911215	AT 1988-115298	19880917
	ES 2028221	T3	19920701	ES 1988-115298	19880917
PRAI	DE 1987-3731812		19870922		
	EP 1988-115298		19880917		
OS	CASREACT 111:153217; MARPAT 111:153217				
AB	RSCOC1 (R = organic radical) were prepared by condensation of RSH with Cl2CO in the presence of mono- or dialkyl-substituted heterocycles containing 1 or 2 tert-N-atoms. Thus, Cl2CO was added over 90-100 min to a mixture of octanethiol and 2-undecylpyridine and the whole maintained at 60° for 1 h to give 99.1% Me(CH2)7SCOC1.				
IT	122813-51-8 122813-53-0				
	RL: CAT (Catalyst use); USES (Uses) (catalyst, for condensation of phosgene with thiols)				
RN	122813-51-8 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1-(2-methylpropyl)- (9CI) (CA INDEX NAME)				



RN 122813-53-0 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-bis(2-methylpropyl)- (9CI) (CA INDEX NAME)



L18 ANSWER 56 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1988:473158 CAPLUS

DN 109:73158

TI Preparation of O-arylcarbamates from isocyanates and phenols, using amidine and guanidine catalysts

IN Noack, Rainer; Seifert, Holger; Neumann, Hagen; Friedel, Peter; Schwetlick, Klaus

PA Technische Universitaet Dresden, Ger. Dem. Rep.

SO Ger. (East), 5 pp.

CODEN: GEXXA8

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DD 250114	A1	19870930	DD 1986-291397	19860618
PRAI	DD 1986-291397		19860618		

AB O-arylcarbamates are prepared from isocyanates and phenols, using as catalysts acyclic, cyclic or bicyclic amidines or guanidines. The reaction of Ph isocyanate with phenol, in Me Et ketone at 50° in the presence of phenyltetramethylguanidine gave O-phenyl-N-phenylurethane in 90% yield.

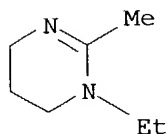
IT **4271-97-0 4335-66-4**

RL: CAT (Catalyst use); USES (Uses)

(catalyst, for arylcarbamate preparation from isocyanates and phenols)

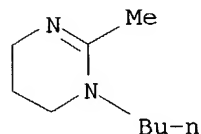
RN 4271-97-0 CAPLUS

CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



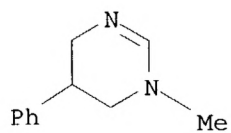
RN 4335-66-4 CAPLUS

CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L18 ANSWER 57 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1988:400820 CAPLUS  
 DN 109:820  
 TI 5-Phenyl-1,4,5,6-tetrahydropyrimidine derivatives, preparation process and medicinal use as antidepressants and/or sedatives  
 IN Lafon, Louis  
 PA Laboratoire L. Lafon, Fr.  
 SO Eur. Pat. Appl., 28 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA French  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 226511	A1	19870624	EP 1986-402703	19861205
	EP 226511	B1	19890802		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	FR 2591592	A1	19870619	FR 1985-18462	19851213
	FR 2591592	B1	19880722		
	FR 2595696	A2	19870918	FR 1986-3644	19860314
	FR 2595696	B2	19900413		
	AT 45151	E	19890815	AT 1986-402703	19861205
	AU 8666395	A1	19870618	AU 1986-66395	19861210
	AU 585105	B2	19890608		
	ZA 8609319	A	19870826	ZA 1986-9319	19861210
	DK 8606013	A	19870614	DK 1986-6013	19861212
	DK 170043	B1	19950508		
	US 4774248	A	19880927	US 1986-941158	19861212
	CA 1273016	A1	19900821	CA 1986-525137	19861212
	JP 62187460	A2	19870815	JP 1986-297445	19861213
PRAI	FR 1985-18462	A	19851213		
	FR 1986-3644	A	19860314		
	EP 1986-402703	A	19861205		
AB	5-Phenyl-1,4,5,6-tetrahydropyrimidine derivs. I and II (X1, X2 = H, F, Cl, Br, CF3; Y = H, OH; Ra = H, C1-4 alkyl, C2-5 alkanoyl; Rb, Rl, R2 = H, C1-3 alkyl) and their addition salts are prepared and used as antidepressants and/or sedatives. 2,2-Dimethyl-5-hydroxy-5-phenylhexahydropyrimidine (III), obtained in 3 steps from 1,3-dichloroacetone, administered i.p., gave a sedative effect of .apprx.1 h for rats and mice at 32 and 256 mg/kg, resp. In mice the maximum nonmortal dose of III was >512 mg/kg, given i.p.				
IT	<b>114703-72-9P</b>				
	RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as antidepressant and/or sedative)				
RN	114703-72-9 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-5-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)				



● HCl

L18 ANSWER 58 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1987:638657 CAPLUS  
 DN 107:238657  
 TI Powder coating compositions  
 IN Rasshofer, Werner; Meyer, Rolf Volker; Kreuder, Hans Joachim  
 PA Bayer A.-G., Fed. Rep. Ger.  
 SO Ger. Offen., 16 pp.  
 CODEN: GWXXBX

DT Patent  
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3545061	A1	19870625	DE 1985-3545061	19851219
	DE 3545061	C2	19910110		
PRAI	DE 1985-3545061		19851219		

AB Powder coating compns. containing carboxylated polymers (acid number 10-150)  
 and

polyepoxides (0.6-1.5 epoxide groups/CO<sub>2</sub>H group) are cured by 0.1-5 phr synergistic catalyst mixture containing amidine and tertiary amine compds. A powdered mixture of isophthalic acid-neopentyl glycol-terephthalic acid-trimellitic anhydride copolymer (softening at 75°; acid number 35) 55.0, triglycidyl isocyanurate 4.2, TiO<sub>2</sub> 40, flow modifier 0.6, PhCH<sub>2</sub>NMe<sub>2</sub> 0.06, and 2-(11-hydroxyheptadecyl)-ar-methylbenzimidazole 0.14 part was electrostatically coated on metal and baked 15 min at 160° to give a 60-μ coating having gloss 89, Erichsen indentation >10 mm, and impact strength 86 in.-lb.

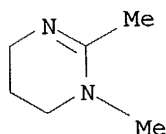
IT **4271-96-9**, 1,4,5,6-Tetrahydro-1,2-dimethylpyrimidine

RL: CAT (Catalyst use); USES (Uses)

(catalysts, for curing of carboxy polyester powder coating by polyepoxide)

RN 4271-96-9 CAPLUS

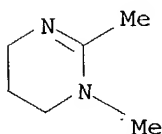
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)





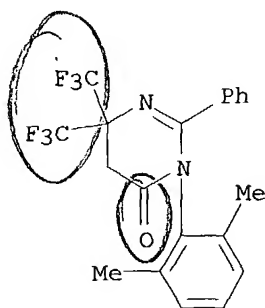
L18 ANSWER 59 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1987:440989 CAPLUS  
 DN 107:40989  
 TI Polyamine preparation from isocyanate prepolymers for use in polyurethanes  
 IN Rasshofer, Werner  
 PA Bayer A.-G., Fed. Rep. Ger.  
 SO Ger. Offen., 9 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3530476	A1	19870305	DE 1985-3530476	19850827
	US 4724252	A	19880209	US 1986-895629	19860811
	CA 1248546	A1	19890110	CA 1986-516091	19860815
	EP 218053	A1	19870415	EP 1986-111380	19860818
	EP 218053	B1	19900530		
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
	AT 53223	E	19900615	AT 1986-111380	19860818
	DD 259870	A5	19880907	DD 1986-293838	19860825
	JP 62050322	A2	19870305	JP 1986-198276	19860826
	BR 8604068	A	19870407	BR 1986-4068	19860826
	ES 2001589	A6	19880601	ES 1986-1361	19860826
	AU 8661877	A1	19870305	AU 1986-61877	19860827
	AU 585056	B2	19890608		
PRAI	DE 1985-3530476		19850827		
	EP 1986-111380		19860818		
AB	Polyamines are prepared in a single step by hydrolyzing prepolymers containing 1.5-15% aromatic NCO groups with mixts. of H <sub>2</sub> O and aprotic, dipolar solvents in the presence of $\geq 0.001$ phr guanidine or amidine catalyst at 50-210°. Adding 500 g polypropylene glycol-2,4-TDI copolymer (3.3% NCO) over 20 min to 1.1 L DMF, 250 g H <sub>2</sub> O, and 1 g diazabicyclononene at 90° and distilling H <sub>2</sub> O and DMF gave a polyamine with NH number 36 mg KOH/g.				
IT	<b>4271-96-9</b> RL: CAT (Catalyst use); USES (Uses) (catalysts, for hydrolysis of isocyanate prepolymers to polyamines)				
RN	4271-96-9 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)				

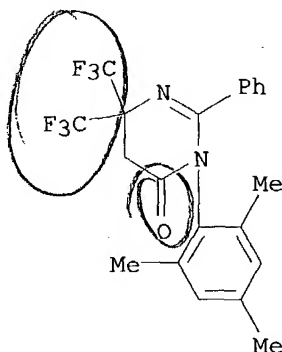


*Send as #21*

L18 ANSWER 60 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1987:176343 CAPLUS  
 DN 106:176343  
 TI Unusual reactions with 4,4-bis(trifluoromethyl)-substituted  
 1,3-heterodienes. 9. Position selectivity of cycloaddition of ketenes to  
 4,4-bis(trifluoromethyl)-substituted 1,3-heterodienes  
 AU Burger, Klaus; Huber, Erasmus; Sewald, Norbert; Partscht, Harald  
 CS Org.-Chem. Inst., Tech. Univ. Muenchen, Garching, D-8046, Fed. Rep. Ger.  
 SO Chemiker-Zeitung (1986), 110(2), 83-6  
 CODEN: CMKZAT; ISSN: 0009-2894  
 DT Journal  
 LA German  
 OS CASREACT 106:176343  
 AB RCON:C(CF<sub>3</sub>)<sub>2</sub> (R = Ph, 4-ClC<sub>6</sub>H<sub>4</sub>, 4-MeC<sub>6</sub>H<sub>4</sub>) react with Ph<sub>2</sub>C:CO in a  
 regiospecific process to yield dioxazines I. Reaction of RCON:C(CF<sub>3</sub>)<sub>2</sub>  
 with AcCl-Et<sub>3</sub>N gives oxazinones II and their enol acetates. The different  
 selectivity of the 2 reactions is explained by a different reaction  
 mechanism. The reaction with AcCl does not involve a ketene intermediate.  
 IT **107364-34-1P 107364-35-2P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 107364-34-1 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-(2,6-dimethylphenyl)-5,6-dihydro-2-phenyl-6,6-  
 bis(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 107364-35-2 CAPLUS  
 CN 4(3H)-Pyrimidinone, 5,6-dihydro-2-phenyl-6,6-bis(trifluoromethyl)-3-(2,4,6-  
 trimethylphenyl)- (9CI) (CA INDEX NAME)



L18 ANSWER 61 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1986:70362 CAPLUS

DN 104:70362

TI Poly(vinyl chloride) plastisols containing adhesion-promoting additives and their use as coatings

IN Hurnik, Helmut; Groegler, Gerhard; Hess, Heinrich; Kopp, Richard

PA Bayer A.-G., Fed. Rep. Ger.

SO Ger. Offen., 52 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3403497	A1	19850808	DE 1984-3403497	19840202
	EP 150803	A2	19850807	EP 1985-100640	19850123
	EP 150803	A3	19860212		
	EP 150803	B1	19880615		
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
	AT 35144	E	19880715	AT 1985-100640	19850123
	US 4623686	A	19861118	US 1985-694562	19850124
	CA 1255042	A1	19890530	CA 1985-472920	19850125
	DK 8500481	A	19850803	DK 1985-481	19850201
	ZA 8500792	A	19850925	ZA 1985-792	19850201
	ES 540068	A1	19851116	ES 1985-540068	19850201
	JP 60188475	A2	19850925	JP 1985-17757	19850202
PRAI	DE 1984-3403497		19840202		
	EP 1985-100640		19850123		

AB The title compns. have good storage stability and contain PVC plastisols and finely divided polyisocyanates with retarded activity (i.e., prepared by reaction of NCO groups with reactive compds.) as well as plasticizers and/or slightly branched, plastisol-compatible polyols m. <60°. Thus, a suspension of 56 g monomer-free trimerized 2,4-TDI (polyisocyanurate with 15.5% NCO, particle size .apprx.10 µ) in 100 g DOP was mixed with 0.4 g 4,4'-methylenebis(2-methylcyclohexanamine) (I) to prepare a composition which was stable even after the addition of 17 g 2,4(or 6)-diamino-3,5-diethyltoluene at 40-60° (without I, the suspension solidified in a few minutes). Adding 5.6 g of the I-containing suspension to 100 g plastisol (1 kg PVC in 700 g DOP) gave a coating composition which had a constant viscosity during >30 days (without I, the plastisol thickened after 1 day) and was applied to nylon 66 fabric to give a coating with adhesion 185 N/5 cm.

IT 4271-96-9D, reaction products with polyisocyanates

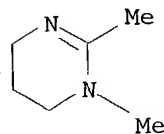
83613-32-5D, reaction products with polyisocyanates

RL: USES (Uses)

(adhesion promoter, PVC plastisol containing, stable)

RN 4271-96-9 CAPLUS

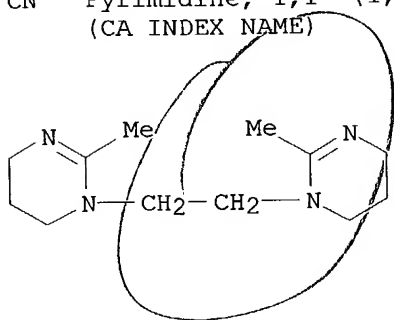
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



Same as #21

RN 83613-32-5 CAPLUS

CN Pyrimidine, 1,1'-(1,2-ethanediyl)bis[1,4,5,6-tetrahydro-2-methyl- (9CI)  
(CA INDEX NAME)



L18 ANSWER 62 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1986:6567 CAPLUS

DN 104:6567

TI Stabilized polyisocyanates, stabilized isocyanates with retarded activity and their use in polyurethane production

IN Groegler, Gerhard; Hess, Heinrich; Kopp, Richard

PA Bayer A.-G. , Fed. Rep. Ger.

SO Ger. Offen., 111 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

*Same as #21*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3403500	A1	19850808	DE 1984-3403500	19840202
	EP 150790	A2	19850807	EP 1985-100575	19850121
	EP 150790	A3	19861008		
	EP 150790	B1	19890301		
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
	AT 41019	E	19890315	AT 1985-100575	19850121
	US 4546165	A	19851008	US 1985-694566	19850124
	CA 1239403	A1	19880719	CA 1985-472921	19850125
	JP 60252619	A2	19851213	JP 1985-15671	19850131
	JP 04010898	B4	19920226		
	BR 8500463	A	19850917	BR 1985-463	19850201
	ES 540066	A1	19851116	ES 1985-540066	19850201
	HU 38377	A2	19860528	HU 1985-392	19850201
	HU 202564	B	19910328		
PRAI	DE 1984-3403500		19840202		
	EP 1985-100575		19850121		

AB The thickening of suspensions of powdered polyisocyanates (m.p. >80°, particle size 1-50  $\mu$ ) at  $\leq 70^\circ$  as suspensions in liqs., such as low- and high-mol.-weight polyols and polyamines used in the manufacture

of polyurethane elastomers, is prevented using 0.3-8 equivalent% amidines and/or guanidines (containing no H atoms reactive with NCO at room temperature).

Thus, a prepolymer (3.58% NCO) from 1 mol polypropylene glycol (OH number 56) and 2 mol TDI was saponified with KOH in aqueous acetone at  $\leq 25^\circ$  and then at reflux to give a polyamine with NH number 47.4. Stirring 100 g this polyamine with 17 g TDI dimer [26747-90-0] (particle size 10-30  $\mu$ ) and 2.76 or 5.52 equivalent% 1,2-dimethyl-1,4,5,6-tetrahydropyrimidine (I) [4271-96-9] gave compns. with thickening temps. 70 and 110°, resp., whereas thickening occurred in a few hours at room temperature in the absence of I.

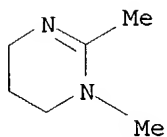
IT 4271-96-9

RL: USES (Uses)

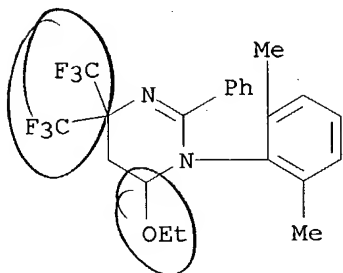
(polymerization inhibitors, low-temperature, for powdered polyisocyanates in liqs.)

RN 4271-96-9 CAPLUS

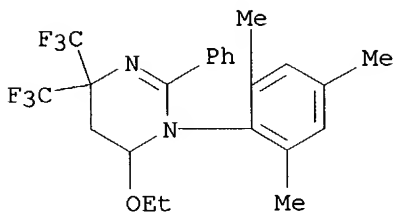
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



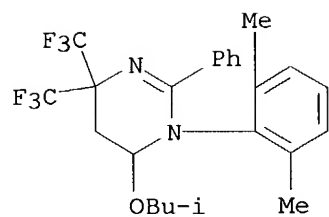
L18 ANSWER 63 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1985:149232 CAPLUS  
 DN 102:149232  
 TI Synthesis of heterocyclic compounds from 4,4-bis(trifluoromethyl)-1,3-diazabuta-1,3-dienes, III. Synthesis of trifluoromethyl-substituted six-membered ring heterocyclic systems by reaction with enol ethers, enamines, and heterocumulenes  
 AU Burger, Klaus; Wassmuth, Ulrike; Forster, Barbara; Penninger, Stefan  
 CS Inst. Org. Chem., Tech. Univ. Muenchen, Garching, D-8046, Fed. Rep. Ger.  
 SO Zeitschrift fuer Naturforschung, Teil B: Anorganische Chemie, Organische Chemie (1984), 39B(10), 1442-52  
 CODEN: ZNBAD2; ISSN: 0340-5087  
 DT Journal  
 LA German  
 OS CASREACT 102:149232  
 AB Regiochem. and site specificity of [4 + 2] cycloaddn. reactions of 4,4-bis(trifluoromethyl)-1,3-diazabuta-1,3-dienes with enol ethers, enamines and heterocumulenes were described. IR, <sup>1</sup>H, <sup>13</sup>C, and <sup>19</sup>F NMR data of the compds. obtained were discussed.  
 IT **94744-09-9P 94744-11-3P 94744-12-4P**  
**94744-13-5P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 94744-09-9 CAPLUS  
 CN Pyrimidine, 1-(2,6-dimethylphenyl)-6-ethoxy-1,4,5,6-tetrahydro-2-phenyl-4,4-bis(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 94744-11-3 CAPLUS  
 CN Pyrimidine, 6-ethoxy-1,4,5,6-tetrahydro-2-phenyl-4,4-bis(trifluoromethyl)-1-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

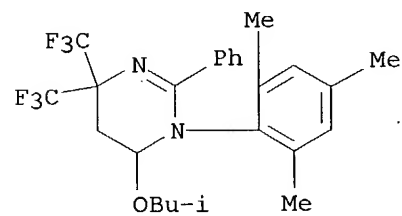


RN 94744-12-4 CAPLUS  
 CN Pyrimidine, 1-(2,6-dimethylphenyl)-1,4,5,6-tetrahydro-6-(2-methylpropoxy)-2-phenyl-4,4-bis(trifluoromethyl)- (9CI) (CA INDEX NAME)



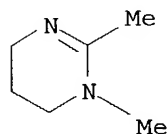
RN 94744-13-5 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-6-(2-methylpropoxy)-2-phenyl-4,4-bis(trifluoromethyl)-1-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



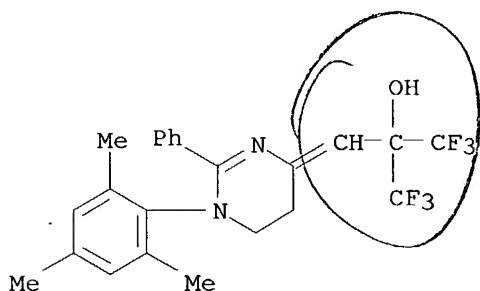


L18 ANSWER 64 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1985:62174 CAPLUS  
DN 102:62174  
TI C-Thioacylation by the Willgerodt-Kindler reaction. Structure of the anomalous products from salicylaldehydes. X-ray crystal structure of the betaine from 1,2-dimethyl-1,4,5,6-tetrahydropyrimidine, sulfur, and 3,5-dichlorosalicylaldehyde  
AU Rajappa, Srinivasachari; Advani, Bhagwan G.; Kartha, Gopinath  
CS Res. Cent., Ciba-Geigy, Bombay, 400 063, India  
SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1984), (8), 1631-4  
CODEN: JCPRB4; ISSN: 0300-922X  
DT Journal  
LA English  
AB Reaction of 1,2-dimethyl-1,4,5,6-tetrahydropyrimidine with 3,5,2-RR1(HO)C6H2CHO (R = R1 = H, Cl; R = OMe, R1 = H) and S in refluxing xylene for 5 h gave betaines I (R, R1 as before) in 6.5-20.7% yield. The structure of I (R = R1 = Cl) was determined by x-ray crystallog.  
IT **4271-96-9**  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclization reactions of, with sulfur and salicylaldehydes, betaines by)  
RN 4271-96-9 CAPLUS  
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

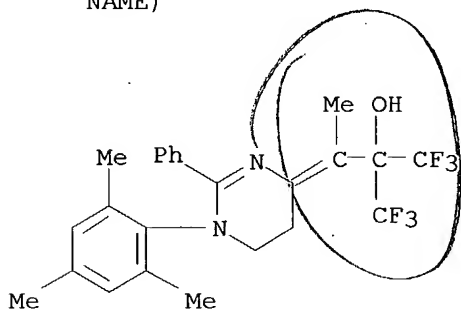


*Same  
as #21*

L18 ANSWER 65 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1984:630456 CAPLUS  
 DN 101:230456  
 TI Unexpected reactions with 4,4-bis(trifluoromethyl)-1,3-diazabuta-1,3-dienes. 6. 1,4-Dihydro-, 1,6-dihydro- and 1,4,5,6-tetrahydropyrimidines from 1,3-diazabuta-1,3-dienes and  $\alpha,\beta$ -unsaturated ketones  
 AU Burger, Klaus; Partscht, Harald; Wassmuth, Ulrike; Gieren, Alfred; Betz, Helmut; Weber, Gabriela; Huebner, Thomas  
 CS Org. Chem. Inst., Tech. Univ. Munchen, Garching, D-8046, Fed. Rep. Ger.  
 SO Chemiker-Zeitung (1984), 108(6), 213-15  
 CODEN: CMKZAT; ISSN: 0009-2894  
 DT Journal  
 LA German  
 OS CASREACT 101:230456  
 AB Treating 2,4,6-Me<sub>3</sub>C<sub>6</sub>H<sub>2</sub>N:CPhN:C(CF<sub>3</sub>)<sub>2</sub> with  $\alpha,\beta$ -unsatd. ketones gave pyrimidines I (R = H, Me), II (R = H, Me), and III (R = H, Et). A reaction sequence consisting of diene metathesis/electrocyclic ring closure, and diene metathesis/intramol. ene reaction is proposed, resp.  
 IT **93366-69-9P 93366-70-2P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 93366-69-9 CAPLUS  
 CN 2-Propanol, 2-[[5,6-dihydro-2-phenyl-1-(2,4,6-trimethylphenyl)-4(1H)-pyrimidinylidene]methyl]-1,1,1,3,3,3-hexafluoro- (9CI) (CA INDEX NAME)

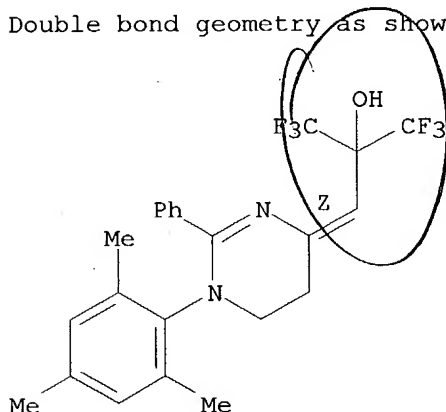


RN 93366-70-2 CAPLUS  
 CN 2-Butanol, 3-[5,6-dihydro-2-phenyl-1-(2,4,6-trimethylphenyl)-4(1H)-pyrimidinylidene]-1,1,1-trifluoro-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)



L18 ANSWER 67 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1984:570283 CAPLUS  
 DN 101:170283  
 TI X-ray structural analysis of a new type of reaction of  
 4,4-bis(trifluoromethyl)-1,3-diazabuta-1,3-dienes with  
 $\alpha,\beta$ -unsaturated ketones. Structure of two isomeric pyrimidine  
 derivatives  
 AU Gieren, Alfred; Betz, Helmut; Weber, Gabriela; Huebner, Thomas; Burger,  
 Klaus; Partscht, Harald; Wassmuth, Ulrike  
 CS Abt. Strukturforsch. I, Max-Planck-Inst. Biochem., Martinsried, D-8033,  
 Fed. Rep. Ger.  
 SO Chemiker-Zeitung (1984), 108(6), 215-17  
 CODEN: CMKZAT; ISSN: 0009-2894  
 DT Journal  
 LA German  
 AB The cycloaddn. of  $(CF_3)_2C:N CPh:NR$  ( $R$  = mesityl) with  $CH_2:CHAc$  gives the  
 isomeric pyrimidines I and II, the crystal and mol. structure of which are  
 determined. The pyrimidine ring in I adopts an ideal half boat conformation;  
 this ring in II is distorted towards a boat. I and II have intramol.  
 O-H...N H-bonds.  
 IT **92413-17-7P**  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and crystalline and mol. structure of)  
 RN 92413-17-7 CAPLUS  
 CN 2-Propanol, 2-[[5,6-dihydro-2-phenyl-1-(2,4,6-trimethylphenyl)-4(1H)-  
 pyrimidinylidene]methyl]-1,1,1,3,3,3-hexafluoro-, (Z)- (9CI) (CA INDEX  
 NAME)

Double bond geometry as shown.



L18 ANSWER 68 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1983:422491 CAPLUS  
 DN 99:22491  
 TI 1,4,5,6-Tetrahydropyrimidine derivatives  
 IN Gauthier, Jean A.; Jirkovsky, Ivo  
 PA Ayerst, McKenna and Harrison Ltd., Can.  
 SO U.S., 12 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4379926	A	19830412	US 1978-904124	19780508
PRAI	US 1978-904124		19780508		

OS CASREACT 99:22491

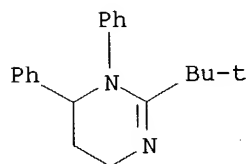
AB Diphenylpyrimidines I (R = alkyl, Ph, 2-furyl, 3-pyridinyl, 2-thienyl, dialkylamino, ZR2; R2 = 1-piperidinyl, 4-morpholinyl; Z = alkylene) were prepared by cyclization of PhNHCHPhCH2CH2COR (II). Thus, PhNHNH2 108.14, CH2O 30.03, and styrene 104.1 g were cyclocondensed to give 135.9 g 2,3-diphenylpyrazolidine. The latter compound (133.9 g) was hydrogenated to give 48.4 g PhNHCHPhCH2CH2NH2, which (5.0 g) was benzoylated to give 2.0 g II (R = Ph). This (12.0 g) was cyclized with POCl3 to give 9.3 g I (R = Ph) (III). In rats, 6.25 mg III/kg orally was an effective diuretic.

IT **86203-73-8P 86203-74-9P 86203-75-0P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation and diuretic activity of)

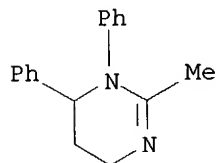
RN 86203-73-8 CAPLUS

CN Pyrimidine, 2-(1,1-dimethylethyl)-1,4,5,6-tetrahydro-1,6-diphenyl- (9CI)  
 (CA INDEX NAME)



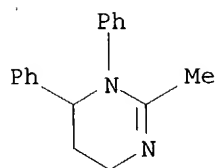
RN 86203-74-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1,6-diphenyl- (9CI) (CA INDEX NAME)



RN 86203-75-0 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1,6-diphenyl-, monohydrobromide (9CI) (CA INDEX NAME)



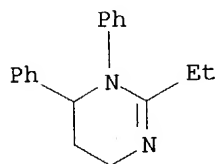
● HBr

IT **86203-68-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 86203-68-1 CAPLUS

CN Pyrimidine, 2-ethyl-1,4,5,6-tetrahydro-1,6-diphenyl- (9CI) (CA INDEX  
NAME)



L18 ANSWER 69 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1983:405333 CAPLUS  
 DN 99:5333  
 TI 4-Nitrodiphenylamines  
 IN Heise, Klaus Peter; Wedemeyer, Karlfried  
 PA Bayer A.-G. , Fed. Rep. Ger.  
 SO Ger. Offen., 32 pp.  
 CODEN: GWXXBX

DT Patent  
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3137041	A1	19830324	DE 1981-3137041	19810917
	US 4404400	A	19830913	US 1982-414224	19820902
	EP 75174	A1	19830330	EP 1982-108191	19820906
	EP 75174	B1	19850807		
	R: BE, DE, FR, GB, IT, NL				
	JP 58062140	A2	19830413	JP 1982-159017	19820914
	JP 02026621	B4	19900612		
PRAI	DE 1981-3137041		19810917		

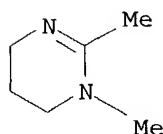
AB Nitrodiphenylamines I (R-R3 = H, alkyl) were prepared by condensation of a halonitrobenzene with an aniline in presence of a Cu compound and a diaza heterocycle. Thus, aniline 93, CuO 2, and 1,8-diazabicyclo[5.4.0]undec-7-ene 3.8 g in 40 mL xylene were heated 20 min at 150°, treated with 4-ClC6H4NO2 157.7 and K2CO3 100 g, and heated 7 h at 193-196° to give 92.6% I (R-R3 = H). I are intermediates for dyes and rubber stabilizers.

IT 4271-96-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (anilines condensation with halonitrobenzenes in presence of)

RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



*Same as #21*

L18 ANSWER 70 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1983:81456 CAPLUS

DN 98:81456

TI Silver complex diffusion-transfer photographic receptor units

PA Mitsubishi Paper Mills, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57078536	A2	19820517	JP 1980-154946	19801104
	JP 63059134	B4	19881117		
PRAI	JP 1980-154946		19801104		

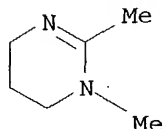
AB Ag complex diffusion-transfer photog. image receptor units contain  $\geq 1$  quaternary ammonium salt of the formula I (A = imidazoline or tetrahydropyrimidine ring; R = H, alkyl, aryl, alkenyl, alkynyl; R1, R2 = alkyl, aryl, alkenyl, alkynyl; X- = anion; n = 0, 1). Thus, a polyethylene-laminated paper support was coated with a composition containing gelatin, poly(vinyl alc.), maleic anhydride-vinyl Me ether copolymer, colloidal PdS, and II to give a receptor unit, on which high d. images were formed rapidly.

IT 4271-96-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with Bu toluenesulfonate)

RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

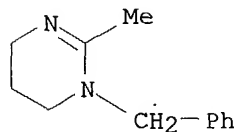


IT 41817-82-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with benzyl chloride)

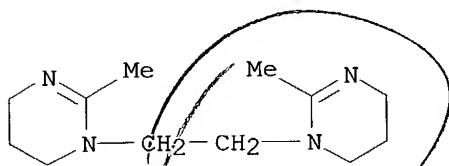
RN 41817-82-7 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



L18 ANSWER 71 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1982:598718 CAPLUS  
 DN 97:198718  
 TI Tetrahydropyrimidines and their use as catalysts in production of  
 polyurethane plastics  
 IN Rasshofer, Werner; Groegler, Gerhard; Kopp, Richard  
 PA Bayer A.-G. , Fed. Rep. Ger.  
 SO Eur. Pat. Appl., 72 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 54876	A1	19820630	EP 1981-110409	19811214
	R: BE, DE, FR, GB, IT, NL				
	DE 3049131	A1	19820715	DE 1980-3049131	19801224
	JP 57130976	A2	19820813	JP 1981-206318	19811222
	US 4665177	A	19870512	US 1985-762347	19850805
PRAI	DE 1980-3049131	A	19801224		
	EP 1981-110409	A	19811214		
	US 1981-332064	A2	19811218		
	JP 1981-206318	A	19811222		
AB	1,2-bis(tetrahydro-2-methylpyrimidin-1-yl)ethane [83613-32-5], 1,7-bis(tetrahydro-2-methylpyrimidin-1-yl)-4-methyl-4-azaheptane (I) [83613-34-7], 1-[3-(dimethylamino)propyl]tetrahydro-2-methylpyrimidine [83613-35-8] and several similar pyrimidine derivs. (as well as salts or complexes) are prepared and used as catalysts for the preparation of polyurethanes. The catalysts are resistant to hydrolysis and have little or no odor. Thus, [H <sub>2</sub> N(CH <sub>2</sub> ) <sub>3</sub> NH(CH <sub>2</sub> ) <sub>3</sub> ]2NMe [83613-41-6] and MeCOCH <sub>2</sub> CO <sub>2</sub> Et [141-97-9] were used to prepare I. A mixture of alkoxylated trimethylolpropane 80, HOCH <sub>2</sub> CH <sub>2</sub> OH 7, dibutyltin dilaurate 0.5, Cl <sub>3</sub> CF 12, I 0.4, and an isophorone diisocyanate-propoxylated glycerol prepolymer 41 g was used to prepare a polyurethane integral foam. The start time and cure time were 21 s and 122 s, resp.				
IT	<b>83613-32-5P 83613-36-9P 83613-37-0P</b> RL: PREP (Preparation) (preparation of and catalysis of polyurethane formation by)				
RN	83613-32-5 CAPLUS				
CN	Pyrimidine, 1,1'-(1,2-ethanediyl)bis[1,4,5,6-tetrahydro-2-methyl- (9CI) (CA INDEX NAME)				

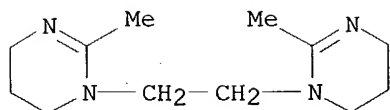


RN 83613-36-9 CAPLUS  
 CN Carbonic acid, compd. with 1,1'-(1,2-ethanediyl)bis[1,4,5,6-tetrahydro-2-methylpyrimidine] (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 83613-32-5  
 CMF C12 H22 N4

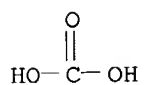




CM 2

CRN 463-79-6

CMF C H2 O3



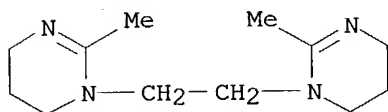
RN 83613-37-0 CAPLUS

CN Phenol, compd. with 1,1'-(1,2-ethanediyl)bis[1,4,5,6-tetrahydro-2-methylpyrimidine] (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 83613-32-5

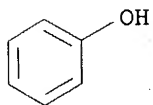
CMF C12 H22 N4



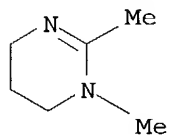
CM 2

CRN 108-95-2

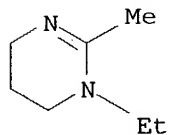
CMF C6 H6 O



L18 ANSWER 72 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1982:582344 CAPLUS  
 DN 97:182344  
 TI Synthesis of 1,1-diamino-2-thioacylethylenes: a novel C-thioacylation by the Willgerodt-Kindler reaction  
 AU Rajappa, S.; Nair, M. D.; Sreenivasan, R.; Advani, B. G.  
 CS Ciba-Geigy Res. Cent., Bombay, 400 063, India  
 SO Tetrahedron (1982), 38(11), 1673-6  
 CODEN: TETRAB; ISSN: 0040-4020  
 DT Journal  
 LA English  
 OS CASREACT 97:182344  
 AB The Willgerodt-Kindler reaction for thioacylation of amines was applied to amidines. Thus treatment of the amidines I ( $n = 2$ ,  $R = \text{Me}$ ,  $\text{Et}$ , cyclohexyl;  $n = 1$ ,  $R = \text{Me}$ ) with aromatic or heterocyclic aldehydes in the presence of S gave thioacylketeneaminals II ( $R = \text{H}$ ,  $R_1R_2 = \text{CHCSR}_3$ ,  $R_3 = \text{aryl or heterocyclyl}$ ). The structure of II ( $R = \text{H}$ ,  $R_1R_2 = \text{CHCSR}_3$ ,  $R_3 = 2\text{-thiophenyl}$ ) (III) was proven by S-methylation to II [ $RR_1 = \text{bond}$ ,  $R_2 = \text{CH:C(SMe)R}_3$ ,  $R_3$  as before] and acid hydrolysis to II ( $R = \text{H}$ ,  $R_1R_2 = \text{CH:COR}_3$ ,  $R_3$  as before). Oxidative cyclization of III gave the isothiazolopyrimidinium salt IV.  
 IT **4271-96-9 4271-97-0**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (thioacylation of, by aldehyde in the presence of sulfur)  
 RN 4271-96-9 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 4271-97-0 CAPLUS  
 CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L18 ANSWER 73 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1982:501650 CAPLUS  
 DN 97:101650  
 TI Silver complex diffusion-transfer photographic processing solutions  
 PA Mitsubishi Paper Mills, Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57022236	A2	19820205	JP 1980-96969	19800716
	JP 61045221	B4	19861007		
PRAI	JP 1980-96969		19800716		

AB Ag complex diffusion-transfer photog. processing solns. contain a quaternary ammonium salt of the formula I (R = H, alkyl, aryl, alkenyl; R1, R2 = alkyl, aryl, alkenyl; A = imidazoline, tetrahydropyrimidine ring; X- = anion). Thus, II 3 + 10-3 mol was added to a diffusion-transfer photog. processing solution containing Na3PO4.12H2O 75, Na2SO3

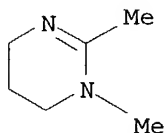
40, KOH 10, Na2S2O3.5H2O 20, KBr 1.0 g, 1-phenyl-5-mercaptotetrazole 50 mg, H2O 700 and methaminoethanolamine (sic) 720 mL.

IT 4271-96-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with Bu p-toluenesulfonic acid)

RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



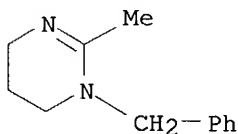
*Same as #70*

IT 41817-82-7

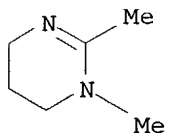
RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with benzyl chloride)

RN 41817-82-7 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

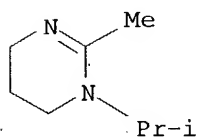


L18 ANSWER 74 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1982:217794 CAPLUS  
DN 96:217794  
TI Synthesis of 1,1-diamino-2-acylethylenes - a direct acylation route  
AU Nair, M. D.; Rajappa, S.; Desai, J. A.  
CS Ciba-Geigy Res. Cent., Bombay, 400063, India  
SO Indian Journal of Chemistry, Section B: Organic Chemistry Including  
Medicinal Chemistry (1982), 21B(1), 1-3  
CODEN: IJSBDB; ISSN: 0376-4699  
DT Journal  
LA English  
OS CASREACT 96:217794  
AB The direct acylation of the active Me groups in 1,2-dimethyl-1,4,5,6-  
tetrahydropyrimidine and 1,2-dimethyl-4,5-dihydroimidazole with aroyl  
chlorides yields diacyl derivs. I (R = 2-thienyl, 2-furyl,  
4,3-Cl(O2N)C6H3, p-ClC6H4) and II (R = p-ClC6H4, p-O2NC6H4) which are  
hydrolysed to 1,1-diamino-2-acylethylenes III and IV.  
IT 4271-96-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(arylation of)  
RN 4271-96-9 CAPLUS  
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX  
NAME)



*Same as #70*

L18 ANSWER 75 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1981:496272 CAPLUS  
 DN 95:96272  
 TI Regioselective carbonyl amination using diisobutylaluminum hydride  
 AU Yamamoto, Hisashi; Maruoka, Keiji  
 CS Dep. Chem., Univ. Hawaii, Honolulu, HI, 96822, USA  
 SO Journal of the American Chemical Society (1981), 103(14), 4186-94  
 CODEN: JACSAT; ISSN: 0002-7863  
 DT Journal  
 LA English  
 OS CASREACT 95:96272  
 AB A selective, and mild approach to N-alkylation of polyamines is demonstrated, which involves the novel reductive cleavage of the C-N bond in cyclic amidines by (Me<sub>2</sub>CHCH<sub>2</sub>)<sub>2</sub>AlH. This method provides a new entry to a wide variety of N-alkylated polyamines and interesting macrocyclic polyamines hitherto accessible only by lengthy or complicated synthesis.  
 IT **78706-88-4P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and ring cleavage of, by diisobutylaluminum hydride, N-isopropyl-N'-ethyldiaminopropane from)  
 RN 78706-88-4 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1-(1-methylethyl)- (9CI) (CA INDEX NAME)



L18 ANSWER 76 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1981:174643 CAPLUS  
 DN 94:174643  
 TI Mixture of 2- and 4-hydroxybenzyl alcohols  
 IN Bauer, Kurt; Moelleken, Reiner; Fiege, Helmut; Wedemeyer, Karlfried  
 PA Bayer A.-G., Fed. Rep. Ger.  
 SO Ger. Offen., 15 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2928554	A1	19810129	DE 1979-2928554	19790714
	US 4245126	A	19810113	US 1979-71427	19790830
	EP 22519	A1	19810121	EP 1980-103762	19800702
	EP 22519	B1	19820203		
	R: BE, CH, DE, FR, GB, IT, NL				
	JP 56016434	A2	19810217	JP 1980-94110	19800711
	JP 63053174	B4	19881021		
PRAI	DE 1979-2928554		19790714		

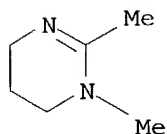
AB The title benzyl alcs. were prepared by reacting PhOH with paraformaldehyde in the presence of basic catalysts, specifically di- or polyamines. Stirring 10 mol PhOH with 1 mol paraformaldehyde and 0.02 mol (Me<sub>2</sub>NCH<sub>2</sub>)<sub>2</sub> 8 h at 70° gave 82% yield with 98% conversion, based on HCHO, of a mixture of 59% 2- and 41% 4-HOC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>OH.

IT **4271-96-9**

RL: CAT (Catalyst use); USES (Uses)  
 (hydroxymethylation catalyst, for phenol with formaldehyde)

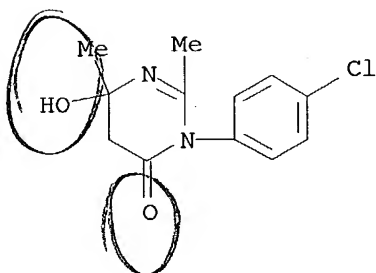
RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

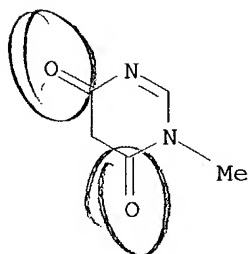


*Same as #70*

L18 ANSWER 77 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1980:426405 CAPLUS  
DN 93:26405  
TI Heterocycles. XIV. Reactions of 2-amino-5-phenyl-1,4-benzodiazepines and 2-amino-6-phenyl-1,5-benzodiazocines with diketene  
AU Natsugari, Hideaki; Meguro, Kanji; Kuwada, Yutaka  
CS Cent. Res. Div., Takeda Chem. Ind., Ltd., Osaka, 532, Japan  
SO Chemical & Pharmaceutical Bulletin (1979), 27(12), 2927-37  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English  
OS CASREACT 93:26405  
AB The reaction of 2-amino-1,5-benzodiazocines with diketene gave 2 isomeric products, e.g. I and II, whereas 2-amino-1,4-benzodiazepines afforded 2-acetoacetamidodiazepines, e.g. III. Treatment of the acetoacetylated derivs. with methanolic HCl or SOCl<sub>2</sub> afforded the corresponding fused pyrimidine derivs., e.g. IV-VI. Thermal dehydration of both I and II gave IV, indicating that acyl migration took place in the reaction of II. III similarly gave a rearranged product.  
IT **73965-04-5p**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 73965-04-5 CAPLUS  
CN 4(3H)-Pyrimidinone, 3-(4-chlorophenyl)-5,6-dihydro-6-hydroxy-2,6-dimethyl-  
(9CI) (CA INDEX NAME)



L18 ANSWER 78 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1980:5774 CAPLUS  
DN 92:5774  
TI Reaction of 4,6-dihydroxypyrimidines with bisulfite ion. I. Structure of products and equilibrium of reversible addition  
AU Kheifets, G. M.  
CS Inst. Eksp. Med., Leningrad, USSR  
SO Zhurnal Organicheskoi Khimii (1979), 15(8), 1744-51  
CODEN: ZORKAE; ISSN: 0514-7492  
DT Journal  
LA Russian  
AB The reaction of I ( $R = R_1 = H$ ) with  $HSO_3M$  ( $M = K, Na$ ) gave II. When  $R$  or  $R_1 = \text{alkyl or aryl}$ , the reaction was inhibited, as was also the case when  $R_1 = Cl$ . I ( $R = H, R_1 = NO_2$ ) did not react. The reactions were followed by UV spectroscopy, and equilibrium consts. were determined  
IT **24391-38-6**  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with bisulfite)  
RN 24391-38-6 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)





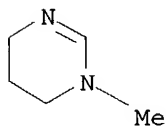
L18 ANSWER 79 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1979:457012 CAPLUS  
 DN 91:57012  
 TI Cyclic formamidines  
 IN Giesecke, Henning; Hocker, Juergen; Merten, Rudolf  
 PA Bayer A.-G., Fed. Rep. Ger.  
 SO Ger. Offen., 18 pp.  
 CODEN: GWXXBX

DT Patent  
 LA German

FAN.CNT 1

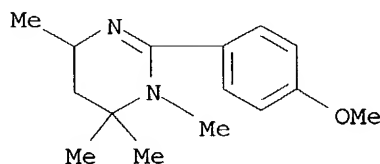
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2748976	A1	19790503	DE 1977-2748976	19771102
PRAI	DE 1977-2748976		19771102		
OS	CASREACT 91:57012				
AB	Cyclic amidines were prepared by reaction of HCONH <sub>2</sub> with RNH(CR <sub>1</sub> R <sub>2</sub> )mCR <sub>3</sub> R <sub>4</sub> CR <sub>5</sub> R <sub>6</sub> (CR <sub>7</sub> R <sub>8</sub> )nNH <sub>2</sub> (R-R <sub>8</sub> = H, alkyl, aralkyl; n, m = 0, 1). Thus, H <sub>2</sub> NCH <sub>2</sub> CH <sub>2</sub> NH <sub>2</sub> was treated with HCONH <sub>2</sub> at 125° to give 70% 2-imidazoline.				
IT	<b>2304-03-2P</b> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)				
RN	2304-03-2 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)				

*Same as #22*



L18 ANSWER 80 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1979:439523 CAPLUS  
 DN 91:39523  
 TI Δ-2-Tetrahydropyrimidines  
 IN Alink, Bernardus A. O.  
 PA Petrolite Corp., USA  
 SO U.S., 6 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4146714	A	19790327	US 1977-802347	19770601
	US 4085104	A	19780418	US 1972-292494	19720927
	US 4163646	A	19790807	US 1976-755535	19761230
	US 4212843	A	19800715	US 1978-942733	19780915
PRAI	US 1972-292494		19720927		
	US 1973-384439		19730801		
	US 1975-597564		19750721		
	US 1977-802347		19770601		
AB	2,3,4,5-Tetrahydropyrimidines were converted to 3,4,5,6-tetrahydropyrimidines by a hydrogenation-dehydrogenation process. Thus, mesityl oxide was treated with NH <sub>4</sub> OH and HCHO in a closed reactor and the resulting 4,4,6-trimethyl-2,3,4,5-tetrahydropyrimidine reduced with NaBH <sub>4</sub> to give 4,4,6-trimethylhexahydropyrimidine, which underwent dehydrogenation in the presence of Ni/kieselguhr to give 4,4,6-trimethyl-3,4,5,6-tetrahydropyrimidine. The 3,4,5,6-tetrahydropyrimidines were useful as corrosion inhibitors in drilling fluids for oil wells and in air drilling.				
IT	<b>70661-48-2</b>				
	RL: RCT (Reactant); RACT (Reactant or reagent) (corrosion inhibition by)				
RN	70661-48-2 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-2-(4-methoxyphenyl)-1,4,6,6-tetramethyl- (9CI) (CA INDEX NAME)				



L18 ANSWER 81 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1979:420117 CAPLUS  
 DN 91:20117  
 TI Benzophenone azine  
 IN Maegawa, Tsukasa; Yokose, Kiyoshi; Kume, Hidetoshi; Hayashi, Hiroshi  
 PA Otsuka Chemical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

102

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 54024859	A2	19790224	JP 1977-91022	19770728
	JP 60058225	B4	19851219		
PRAI	JP 1977-91022		19770728		

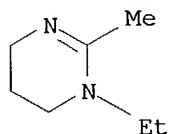
AB Benzophenone azine (I), useful for preparing  $\text{NH}_2\text{NH}_2$ , was prepared by oxidizing benzophenone imine (II) with mol. O in the presence of Cu halide and N compds. Thus, 20 g of benzophenone solution containing 4 g II was warmed with 0.77 g  $\text{Cu}_2\text{Br}_2$ , and 0.75 g sec-BuNH<sub>2</sub> in  $\text{CH}_2\text{Cl}_2$ , and dried air was introduced for 5 h at the rate of 1.0 L/min to give 87.7% I. Similarly used were Bu<sub>2</sub>NH, 1,8-diazabicyclo[5.4.0]undec-7-ene, (iso-Bu)<sub>2</sub>NH, 1,6-diazabicyclo[4.3.0]non-5-ene, 2-methyl-2-imidazoline, and 1-ethyl-2-methyl-4,5,6-trihydropyrimidine.

IT 4271-97-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (catalysts containing cuprous bromide and, for oxidation of benzophenone imine)

RN 4271-97-0 CAPLUS

CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L18 ANSWER 82 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1979:169831 CAPLUS  
 DN 90:169831  
 TI Foam moldings based on polyurethane  
 IN Kleimann, Helmut; Lienert, Hans Juergen; Meyborg, Holger; Groegler, Gerhard  
 PA Bayer A.-G., Fed. Rep. Ger.  
 SO Ger. Offen., 31 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2737671	A1	19790222	DE 1977-2737671	19770820
PRAI	DE 1977-2737671		19770820		

AB Foam moldings having skin surfaces and cellular caves and integral d. distribution over the cross section of the molding were prepared by foaming a reaction mixture of aliphatic polyisocyanates and polyols in a closed mold using tin compds. and amidines or imidazoles as catalysts. Thus, a polyol mixture (95 parts propylene oxide-trimethylolpropane polyether, 5 parts ethylene glycol) 100, polyalkylene oxide-siloxane block copolymer foam stabilizer 3, 1-cyclohexyl-2-methyltetrahydropyrimidine [59064-59-4] catalyst 1, dibutyltin dilaurate [77-58-7] catalyst 0.5, FCl3C blowing agent 10, and an aliphatic polyisocyanate (prepared from a propylene oxide-trimethylpropane polyol 7.74, a castor oil-cyclohexanone-HCHO polyester 1.47, and 1-isocyanato-3,3,5-trimethyl-5-isocyanatomethyl cyclohexane 121.9 mol) 277 parts were mixed, placed in a 90° metal mold, and foamed and hardened under pressure. After 5 min, the molding was removed, having d. 0.6 g/cm<sup>3</sup> and a compact skin on all sides. After weathering 1000 h in a Weather-o-meter, the molding had 100% residual gloss and very little discoloration.

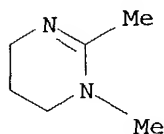
IT 4271-96-9

RL: CAT (Catalyst use); USES (Uses)

(catalysts, for polymerization of polyurethanes for foam moldings)

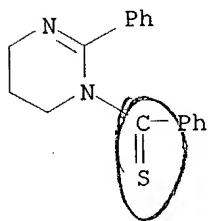
RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



*same as #70*

L18 ANSWER 83 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1979:168543 CAPLUS  
DN 90:168543  
TI Amine reactions with bis(thioamides)  
AU Ewin, Gavin; Hill, John O.  
CS Dep. Inorg. Anal. Chem., La Trobe Univ., Bundoora, Australia  
SO Australian Journal of Chemistry (1979), 32(2), 441-4  
CODEN: AJCHAS; ISSN: 0004-9425  
DT Journal  
LA English  
OS CASREACT 90:168543  
AB The reaction of N,N'-ethylenebis(thiobenzamide) and H<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> in the presence of HgO yielding 2-phenyl-2-imidazoline proceeds in 2 steps since the intermediate, 2-phenyl-1-thiobenzoyl-2-imidazoline, was isolated and characterized. An amine exchange reaction involving a bis(thioamide) is reported, which is a new variation of the Wallach reaction.  
IT **70011-91-5P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 70011-91-5 CAPLUS  
CN Pyrimidine, 1,4,5,6-tetrahydro-2-phenyl-1-(phenylthioxomethyl)- (9CI) (CA INDEX NAME)



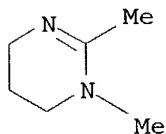
A handwritten signature or mark, possibly a stylized 'P' or 'B', located to the right of the chemical structure.

L18 ANSWER 84 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1979:104960 CAPLUS  
 DN 90:104960  
 TI Use of amidines as reaction initiators in the manufacture of polyureas  
 IN Gruber, Hermann; Botta, Artur; Wuest, Rudolfo  
 PA Bayer A.-G., Fed. Rep. Ger.  
 SO Ger. Offen., 22 pp.  
 CODEN: GWXXBX

DT Patent  
 LA German

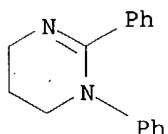
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2722514	A1	19781130	DE 1977-2722514	19770518
	DE 2722514	C2	19821014		
	GB 1585455	A	19810304	GB 1978-18942	19780511
	BE 867171	A1	19781117	BE 1978-187776	19780517
	FR 2391235	A1	19781215	FR 1978-14773	19780518
	FR 2391235	B1	19841123		
PRAI	DE 1977-2722514		19770518		
AB	1,8-Diazabicyclo[5.4.0]undec-7-ene (I) [6674-22-2], 1,4,5,6-tetrahydro-1,2-dimethylpyrimidine [4271-96-9], 2-[(benzyl)(methyl)amino]azacyclohept-1-ene [69260-43-1], benzyliminocaprolactam (II) [7048-72-8], 2-butyylimino-N-methylbutyrolactam [69260-44-2], and 17 similar amidines accelerate the hardening of mixts. of a polyamine and a polyisocyanate containing blocked isocyanate groups to form polyureas but do not affect the properties of the hardened comps. Thus, 2,4-tolylene diisocyanate was treated with propoxylated trimethylolpropane and 4-nonylphenol to prepare a blocked polyisocyanate which was mixed with 6% bis(4-amino-3-methylcyclohexyl)methane [6864-37-5] and 0.1% I. The mixture had processing time 2 min and drying time 7 min, compared with 4 h and 17 h, resp., without I.				
IT	4271-96-9 RL: CAT (Catalyst use); USES (Uses) (catalysts, for hardening of blocked polyisocyanates with polyamines)				
RN	4271-96-9 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)				



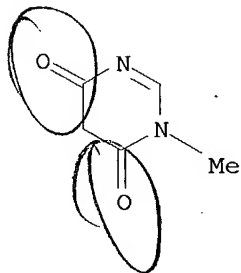
*Same as #70*

L18 ANSWER 86 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1978:579120 CAPLUS  
DN 89:179120  
TI Alkaline hydrolysis of 1,2,3-trisubstituted cyclic amidinium salts.  
Kinetic study of N-N' acyl migration in alkaline solution in an  
ethylenediamine derivative  
AU Fernandez, Beatriz; Perillo, Isabel; Lamdan, Samuel  
CS Dep. Quim. Org., Univ. Nac. Buenos Aires, Buenos Aires, Argent.  
SO Journal of the Chemical Society, Perkin Transactions 2: Physical Organic  
Chemistry (1972-1999) (1978), (6), 545-50  
CODEN: JCPKBH; ISSN: 0300-9580  
DT Journal  
LA English  
AB Alkaline hydrolysis of 1,2-diphenyl-3-methylimidazolinium iodide gave  
PhNBz(CH<sub>2</sub>)<sub>2</sub>NHMe (I) via an isolated intermediate [possibly  
1,2-diphenyl-2-hydroxy-3-methylimidazolidine (II)]. In neutral or acidic  
media, I gave BzNMe(CH<sub>2</sub>)<sub>2</sub>NHPh via the tetrahedral addition intermediate II.  
Pseudo first order rate consts. show first order dependence on OH-  
activity over the pH range studied (11.65-12.80) indicating negligible  
contribution by the anion of II. Alkaline hydrolysis of 1,2-diphenyl-1,4,5,6-  
tetrahydropyrimidinium gave BzNMe(CH<sub>2</sub>)<sub>2</sub>NHPh with no isolable intermediate.  
IT **52289-23-3**  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with Me iodide)  
RN 52289-23-3 CAPLUS  
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-diphenyl- (9CI) (CA INDEX NAME)



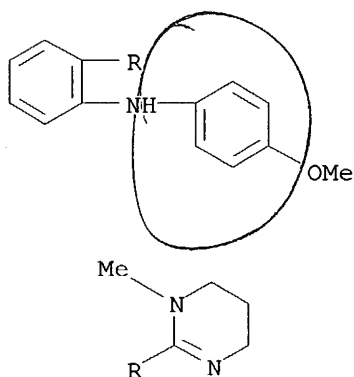
*Same  
as #46*

LI8 ANSWER 87 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1977:467538 CAPLUS  
DN 87:67538  
TI 1,4-Addition of bisulfite ion to pyrimidines containing a  
 $\beta$ -dicarbonyl fragment  
AU Kheifets, G. M.  
CS Inst. Eksp. Med., Leningrad, USSR  
SO Khim. Dikarbonil'nykh Soedin., Tezisy Dokl. Vses. Konf., 4th (1976),  
Meeting Date 1975, 174-5 Publisher: Rzh. Politekh. Inst., Riga, USSR.  
CODEN: 35OSAW  
DT Conference  
LA Russian  
AB Equilibrium consts. were determined for the addition of  $\text{HSO}_3^-$  to I (R = H or a  
1-, 2-,  
or 5-substituent) to give II. The equilibrium was strongly shifted toward II  
only when no substituent was present on C-2 or C-5. Kinetic results were  
also described.  
IT **24391-38-6**  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(addition reaction of, with bisulfite, equilibrium of)  
RN 24391-38-6 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

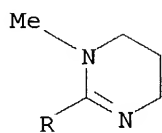
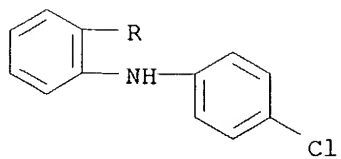




L18 ANSWER 88 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1977:405904 CAPLUS  
 DN 87:5904  
 TI Heterocyclic sulfur compounds. LXXXII. 2-(2-Aminophenyl)tetrahydropyrimidines, 2,3,4,7-tetrahydropyrimido[1,2-c]quinazoline-6-thiones, and 1,1',2,2'-tetrahydro-4,4'-(polymethylenedinitrilo)bis(4H-3,1-benzothiazines)  
 AU Legrand, Louis  
 CS Dep. Chim., Univ. Caen, Caen, Fr.  
 SO Bulletin de la Societe Chimique de France (1976), (11-12, Pt. 2), 1857-60  
 CODEN: BSCFAS; ISSN: 0037-8968  
 DT Journal  
 LA French  
 OS CASREACT 87:5904  
 AB Reaction of benzothiazinethiones I (R = Me, Et, Ph, 4-MeC<sub>6</sub>H<sub>4</sub>, 4-MeOC<sub>6</sub>H<sub>4</sub>, 4-ClC<sub>6</sub>H<sub>4</sub>, R<sub>1</sub> = H, Cl) with R<sub>2</sub>NH(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> (R<sub>2</sub> = H, Me, Et) gave the anilinetetrahydropyrimidines II and 2-R<sub>2</sub>NHC<sub>6</sub>H<sub>4</sub>CSNH(CH<sub>2</sub>)<sub>3</sub>NHCSC<sub>6</sub>H<sub>4</sub>NHR<sub>2</sub>-2 (R<sub>2</sub> = Me, Et). Reaction of I with H<sub>2</sub>N(CH<sub>2</sub>)<sub>n</sub>NH<sub>2</sub> (n = 4, 5, 8) gave the dimers III. II (R<sub>1</sub> = H) cyclized with CS<sub>2</sub> to pyrimidoquinazolinethiones IV.  
 IT **62838-33-9P 62838-34-0P 62838-35-1P 62838-36-2P**  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 62838-33-9 CAPLUS  
 CN Benzenamine, N-(4-methoxyphenyl)-2-(1,4,5,6-tetrahydro-1-methyl-2-pyrimidinyl)- (9CI) (CA INDEX NAME)

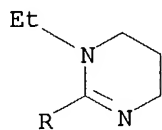
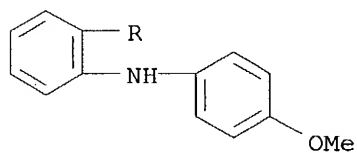


RN 62838-34-0 CAPLUS  
 CN Benzenamine, N-(4-chlorophenyl)-2-(1,4,5,6-tetrahydro-1-methyl-2-pyrimidinyl)- (9CI) (CA INDEX NAME)



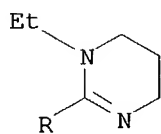
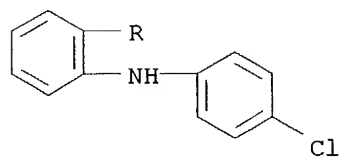
RN 62838-35-1 CAPLUS

CN Benzenamine, 2-(1-ethyl-1,4,5,6-tetrahydro-2-pyrimidinyl)-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 62838-36-2 CAPLUS

CN Benzenamine, N-(4-chlorophenyl)-2-(1-ethyl-1,4,5,6-tetrahydro-2-pyrimidinyl)- (9CI) (CA INDEX NAME)



L18 ANSWER 89 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1976:577476 CAPLUS  
DN 85:177476  
TI Substituted pyrimidines  
PA Uriach, J., y Cia. S. A., Spain  
SO Span., 8 pp.  
CODEN: SPXXAD  
DT Patent  
LA Spanish  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	ES 415740	A1	19760116	ES 1973-415740	19730530
PRAI	ES 1973-415740	A	19730530		

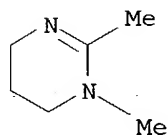
AB The thienylvinylpyrimidine pamoates I (R = H, Me) were prepared by 2-formylthiophene with 1,2-dimethyl-1,4,5,6-tetrahydropyrimidine in the presence of dicyclohexylcarbodiimide, followed by addition of the pamoic acids.

IT **4271-96-9**  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with formylthiophene)

RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

*Same as #70*



L18 ANSWER 90 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1976:421505 CAPLUS  
 DN 85:21505  
 TI Heterocyclic compounds  
 IN White, Alan Chapman; Black, Robin Michael  
 PA John Wyeth and Brother Ltd., UK  
 SO U.S., 10 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3926994	A	19751216	US 1974-472759	19740523
	GB 1434099	A	19760428	GB 1973-26079	19740517
	US 3965112	A	19760622	US 1975-582043	19750529
	US 3996207	A	19761207	US 1975-582038	19750529
PRAI	US 1972-309580	A2	19721124		
	GB 1973-26079	A	19730531		
	GB 1971-1250	A	19710111		
	GB 1972-12069	A	19720315		
	GB 1972-11199	A	19721130		
	US 1974-472759	A2	19740523		

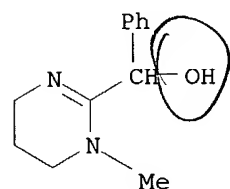
AB Diaza heterocycles I (R = OH, Cl, MeO; R1 = Ph, 4-ClC6H4, 2-BrC6H4; R2 = Ph, ClC6H4, 4-MeOC6H4, 2,6-Me2C6H3, 1-naphthyl; R3 = H, Me, Ac; R4 = H, Me, OH; R5 = H, Me; n = 0-3) (29 compds.), useful as diuretics in rats (no data) and hypoglycemics in rats at  $\leq 50$  mg/kg, were prepared by Grignard reaction of R2Br with ketones I (RR2 = O). Mild (MnO2) oxidation of I (R = H, R2 = OH) gave I (RR2 = O). When necessary, I (R = H, R2 = OH) were prepared by refluxing esters HOCHR1C(:NH)OEt.HCl with diamines R3NH(CH2)nCR4R5CH2NH2 in EtOH 5-16 hr.

IT **42734-30-5**

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (oxidation of)

RN 42734-30-5 CAPLUS

CN 2-Pyrimidinemethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -phenyl- (9CI)  
 (CA INDEX NAME)

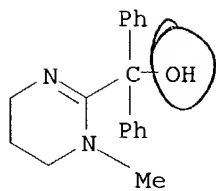


IT **42734-31-6P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 42734-31-6 CAPLUS

CN 2-Pyrimidinemethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha,\alpha$ -diphenyl-  
 , monohydrobromide (9CI) (CA INDEX NAME)



● HBr

L18 ANSWER 91 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1976:164841 CAPLUS  
 DN 84:164841  
 TI 1-Substituted 2-methyltetrahydropyrimidines  
 IN Groegler, Gerhard; Dankert, Gerhard; Recker, Klaus; Backes, Josef  
 PA Bayer A.-G., Fed. Rep. Ger.  
 SO Ger. Offen., 18 pp.  
 CODEN: GWXXBX

DT Patent  
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2439550	A1	19760226	DE 1974-2439550	19740817
	DE 2439550	B2	19770421		
	DE 2439550	C3	19771201		
	US 4001232	A	19770104	US 1975-598083	19750722
	BE 832428	A1	19760216	BE 1975-159199	19750814
	SE 7509126	A	19760218	SE 1975-9126	19750814
	NL 7509711	A	19760219	NL 1975-9711	19750814
	FR 2281928	A1	19760312	FR 1975-25387	19750814
	FR 2281928	B1	19781027		
	ES 440266	A1	19770316	ES 1975-440266	19750814
	AT 7506332	A	19770815	AT 1975-6332	19750814
	JP 51043770	A2	19760414	JP 1975-98667	19750815
	JP 60004175	B4	19850201		
	GB 1464829	A	19770216	GB 1975-34076	19750815
	CH 598229	A	19780428	CH 1975-10678	19750815
	CA 1050547	A1	19790313	CA 1975-233556	19750815
PRAI	DE 1974-2439550		19740817		

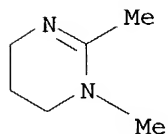
AB Tetrahydropyrimidines I (R = Me, cyclohexyl, CH<sub>2</sub>CH<sub>2</sub>OH, Bu, CH<sub>2</sub>CH<sub>2</sub>EtBu, dodecyl, 1-methylcyclohexyl, CH<sub>2</sub>CHMeBu, 3,3,5-trimethylcyclohexyl, CH<sub>2</sub>Ph) were prepared in 65-91% yield by condensing AcCH<sub>2</sub>CO<sub>2</sub>Et with RNH(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub>. I are catalysts for isocyanate-polyol addition (no data).

IT **4271-96-9P 4335-66-4P 41817-82-7P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 4271-96-9 CAPLUS

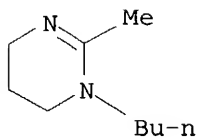
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



*Same as #70*

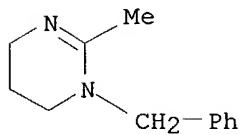
RN 4335-66-4 CAPLUS

CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 41817-82-7 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



L18 ANSWER 92 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1976:136685 CAPLUS  
 DN 84:136685  
 TI Amidine-metal complexes  
 IN Welte, Rainer; Groegler, Gerhard  
 PA Bayer A.-G., Fed. Rep. Ger.  
 SO Ger. Offen., 35 pp.  
 CODEN: GWXXBX

DT Patent  
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2434185	A1	19760205	DE 1974-2434185	19740716
	GB 1496403	A	19771230	GB 1975-22198	19750522
	US 4006124	A	19770201	US 1975-590768	19750626
	AT 7505413	A	19760515	AT 1975-5413	19750714
	AT 334394	B	19760110		
	DK 7503218	A	19760117	DK 1975-3218	19750715
	SE 7508090	A	19760119	SE 1975-8090	19750715
	ZA 7504557	A	19760630	ZA 1975-4557	19750715
	BR 7504483	A	19760706	BR 1975-4483	19750715
	JP 51125025	A2	19761101	JP 1975-85903	19750715
	AU 7583057	A1	19770120	AU 1975-83057	19750715
	ES 439419	A1	19770216	ES 1975-439419	19750715
	BE 831423	A1	19760116	BE 1975-158345	19750716
	NL 7508518	A	19760120	NL 1975-8518	19750716
	FR 2278680	A1	19760213	FR 1975-22255	19750716
	FR 2278680	B1	19790511		
PRAI	DE 1974-2434185		19740716		

AB Complexes of 2,3-dimethyl-3,4,5,6-tetrahydropyrimidine (I) [4271-96-9] and dibutyltin dilaurate (II) [77-58-7], N-methylimidazole [616-47-7] and II, I and zinc acetate [557-34-6], I and ferrous acetylacetonate [14024-17-0], and similar complexes were used as catalysts for isocyanate polyaddn. reaction. The catalysts were odorless, were inert to water and halogenated hydrocarbons, and had good catalytic activity. Thus, a mixture of alkoxylated propanediol 70, alkoxylated trimethylolpropane 20, 1,4-butanediol 8, Cl3CF 12, and 40-14 I-II complex 0.054 g was mixed rapidly with 76.7 g diisocyanatodiphenylmethane to prepare a semi-rigid polyether foam with foam time 30 sec and hardening time 50 sec.

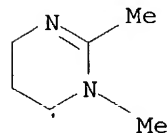
IT 4271-96-9D, Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl-, metal complexes

RL: CAT (Catalyst use); USES (Uses)

(catalysts, for hardening of polyurethane foam)

RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



*Same as before!*

IT 2304-03-2D, Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-, metal



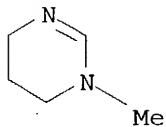
complexes

RL: CAT (Catalyst use); USES (Uses)

(catalysts, for hardening of polyurethane foams)

RN 2304-03-2 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L18 ANSWER 93 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1976:121805 CAPLUS  
 DN 84:121805  
 TI Oxazolidones  
 IN Karasawa, Yoshiharu; Narahara, Toshikazu  
 PA Hitachi, Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 50117771	A2	19750916	JP 1974-25228	19740306
	JP 52034624	B4	19770905		
PRAI	JP 1974-25228		19740306		

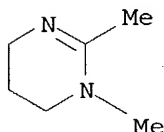
AB In the preparation of oxazolidone or polyoxazolidones from epoxy compds. and organic isocyanates, cycloamidines I (R1 = H, C1-8 alkyl; R2 = C1-8 alkyl, n = 2-6) or II (X1,X2 = alkylene, m = 2-11) or their salts were used as catalysts. Thus, phenyl glycidyl ether, 1,8-diazabicyclo[5.4.0]undec-7-ene (III), o-Cl<sub>2</sub>C<sub>6</sub>H<sub>4</sub>, and PhNCO was heated to give 93% 3-phenyl-5-phenoxyethyl-2-oxazolidone. Bisphenol A diglycidyl ether, DMF, III, and 4,4'-diphenylmethane diisocyanate gave 96% polyoxazolidone. 1,5-Diazabicyclo[4.3.0]non-5-ene and 1,2-dimethyl-1,4,5,6-tetrahydropyrimidine were also used in place of III.

IT 4271-96-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (catalysts for cyclocondensation reaction of glycidyl ethers with isocyanates)

RN 4271-96-9 CAPLUS

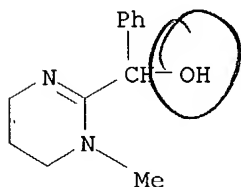
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



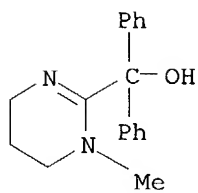
*Same as before*

L18 ANSWER 94 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1975:579107 CAPLUS  
 DN 83:179107  
 TI Tetrahydropyrimidines, imidazolines, and tetrahydro-1,3-diazepines  
 IN White, Alan Chapman; Black, Robin Michael  
 PA John Wyeth and Brother Ltd., UK  
 SO Brit., 13 pp. Division of Brit. 1,366,133.  
 CODEN: BRXXAA  
 DT Patent  
 LA English  
 FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 1403732	A	19750820	GB 1972-11199	19721130
	US 3996207	A	19761207	US 1975-582038	19750529
PRAI	GB 1971-1250	A	19710111		
	GB 1972-12069	A	19720315		
	US 1972-309580	A2	19721124		
	GB 1972-11199	A	19721130		
	GB 1973-26079	A	19730531		
	US 1974-472759	A2	19740523		
AB	Twenty-six title compds I (n = 1, 2; RR1 = O; R = aryl, R1 = OH, OAc, OMe, Cl; R2 = H, Me, Ac; R3 = H, Me, Cl, Br; R4 = H, Cl; R5 = H, Cl, OMe; R6 = H, Me), II, and I acid addition salts, and 10 related compds. were prepared from related alcs. by oxidation or from related monoaryl ketones by treatment with arylmagnesium halides. Thus, I (n = 2, RR1 = O, R2 = R4 = R5 = R6 = H, R3 = Br) was prepared from I (n = 2, R = R2 = R4 = R5 = R6 = H, R1 = OH, R3 = Br) in CH2Cl2 by treatment with MnO2 48 hr at room temperature I (n = 2,				
R	= Ph, R1 = OH, R2 = R3 = R6 = H, R4, R5 = H, Cl) and [4,4 (or 5,5)-dimethyl-2-imidazolinyl]- $\alpha,\alpha$ -diphenylmethanol-HCl showed hypoglycemic activity, which was assessed in rats. I (n = 2, R = Ph, R1 = OH, R2 = R3 = R4 = R5 = R6 = H) also showed sympatholytic activity (no data). Compns. containing I were described.				
IT	<b>42734-30-5</b>				
	RL: RCT (Reactant); RACT (Reactant or reagent) (oxidation of)				
RN	42734-30-5 CAPLUS				
CN	2-Pyrimidinemethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -phenyl- (9CI) (CA INDEX NAME)				



IT **42734-31-6P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 42734-31-6 CAPLUS  
 CN 2-Pyrimidinemethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha,\alpha$ -diphenyl-  
 , monohydrobromide (9CI) (CA INDEX NAME)



● HBr

L18 ANSWER 95 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1975:460703 CAPLUS

DN 83:60703

TI Highly-filled polyurethane foams

IN Meisert, Ernst; Muehlhausen, Cornelius; Groegler, Gerhard; Fischer, Alfred; Ebner, Wolfgang; Wandel, Martin; Von Langenthal, Wolfram

PA Bayer A.-G., Fed. Rep. Ger.

SO Ger. Offen., 21 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2351844	A1	19750417	DE 1973-2351844	19731016
	DE 2351844	B2	19791004		
	DE 2351844	C3	19800619		
	BE 821031	A1	19750414	BE 1974-149497	19741014
	DK 7405388	A	19750616	DK 1974-5388	19741015
	GB 1454016	A	19761027	GB 1974-44559	19741015
	NL 7413611	A	19750418	NL 1974-13611	19741016
	FR 2247486	A1	19750509	FR 1974-34827	19741016
	JP 50067896	A2	19750606	JP 1974-118297	19741016
	JP 56008846	B4	19810226		
	ES 431076	A1	19761016	ES 1974-431076	19741016
PRAI	DE 1973-2351844		19731016		

AB Polyurethane foams with filler content >50% and uniform properties are prepared by mixing polyether polyols (mol. weight 400-10,000, optionally containing

polyols with mol. weight 50-400), inorg. fillers, desiccants (particularly Na aluminosilicate (I) [1344-00-9]), cyclic amidine catalysts, monocarboxylic acids and/or other blowing agents, and polyisocyanates, and hardening the foams by short heating. Thus, intensively mixing polypropylene glycol (OH number 56) 100, oleic acid 0.8, 1:1 I-castor oil paste 4, chalk 250, and 3,4,5,6-tetrahydro-2,3-dimethylpyrimidine [4271-96-9] 0.35 part, adding 16.1 parts polymethylenepolyphenylene isocyanate (NCO content 31%), mixing 30 sec, and heating 15 min at 110° gives a foam, d. 1.16, tensile strength 4.9 kg/cm<sup>2</sup>, elongation 37%, Shore A hardness 43.

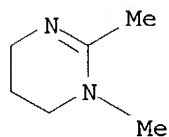
IT 4271-96-9

RL: CAT (Catalyst use); USES (Uses)

(catalysts, for polyurethane foam manufacture)

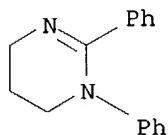
RN 4271-96-9 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



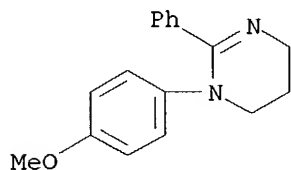
*Sample*

L18 ANSWER 96 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1975:85893 CAPLUS  
 DN 82:85893  
 TI Basicity and alkaline hydrolysis of 1,2-diaryl-1,4,5,6-tetrahydropyrimidines. Application of the Hammett equation  
 AU Fernandez, Beatriz; Perillo, Isabel; Lamdan, Samuel  
 CS Dep. Quim. Org., Univ. Buenos Aires, Buenos Aires, Argent.  
 SO Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry (1972-1999) (1974), (12), 1416-18  
 CODEN: JCPKBH; ISSN: 0300-9580  
 DT Journal  
 LA English  
 AB Substituent effects on the basicity (at 25°) and on the hydrolysis kinetics in boiling alkaline 95% EtOH of nine 1,2-diaryl-1,4,5,6-tetrahydropyrimidines, studied spectrally, were linearly related by the Hammett equation when the pyrimidine ring was regarded as a substituent of the benzene ring at N-1. Reaction rates were increased by electron-releasing phenyl substituents at N-1 and decreased by electron-withdrawing groups. An expression relating the rate consts. of hydrolysis to the ionization consts. of tetrahydropyridinium ions was determined  
 IT 52289-23-3 52289-26-6 52289-28-8  
 52289-36-8  
 RL: PRP (Properties)  
 (basicity and hydrolysis kinetics of)  
 RN 52289-23-3 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-diphenyl- (9CI) (CA INDEX NAME)

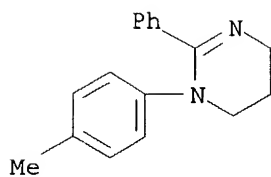


*Same*

RN 52289-26-6 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-(4-methoxyphenyl)-2-phenyl- (9CI) (CA INDEX NAME)

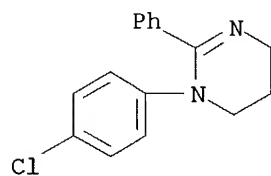


RN 52289-28-8 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-(4-methylphenyl)-2-phenyl- (9CI) (CA INDEX NAME)

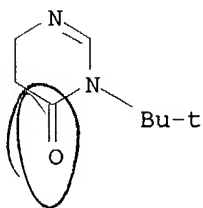


RN 52289-36-8 CAPLUS

CN Pyrimidine, 1-(4-chlorophenyl)-1,4,5,6-tetrahydro-2-phenyl- (9CI) (CA  
INDEX NAME)

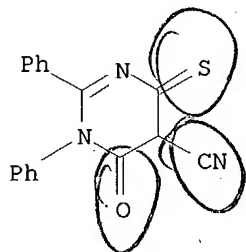


L18 ANSWER 97 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1975:72919 CAPLUS  
 DN 82:72919  
 TI Transformimidoylation of 1-(N-alkyliminoformyl)imidazole with amino acid  
 AU Ito, Yoshihiko; Inubushi, Yoshinori; Saegusa, Takeo  
 CS Fac. Eng., Kyoto Univ., Kyoto, Japan  
 SO Synthetic Communications (1974), 4(5), 289-95  
 CODEN: SYNCAV; ISSN: 0039-7911  
 DT Journal  
 LA English  
 AB The heterocycles I (R = CMe<sub>3</sub>, cyclohexyl; R<sub>1</sub> = H, Me; n = 0,1) were prepared by transformimidoylation of the imidazoles II with H<sub>2</sub>NCHR<sub>1</sub>(CH<sub>2</sub>)<sub>n</sub>CO<sub>2</sub>H and cyclization of RN:CHNHCHR<sub>1</sub>(CH<sub>2</sub>)<sub>n</sub>CO<sub>2</sub>H (III) with Ac<sub>2</sub>O-pyridine. III (R = CMe<sub>3</sub>, R<sub>1</sub> = H, Me, n = 2; R = cyclohexyl, R<sub>1</sub> = H, 4-imidazolylmethyl, n = 0) similarly were prepared III (R = CMe<sub>3</sub>, R = H, n = 2) could not be cyclized to I, but gave a mixture of butyrolactams.  
 IT **55474-54-9P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 55474-54-9 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-(1,1-dimethylethyl)-5,6-dihydro- (9CI) (CA INDEX NAME)

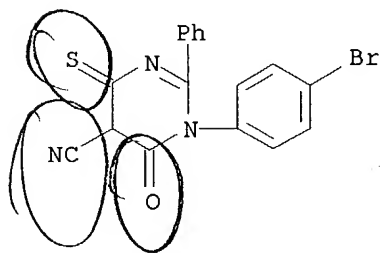




L18 ANSWER 98 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1975:57641 CAPLUS  
 DN 82:57641  
 TI Isothiocyanates. XXXIV. Substituted pyrimidinethiones  
 AU Barnikow, Guenter; Ebeling, Horst  
 CS Sekt. Chem., Humboldt-Univ. Berlin, Berlin, Ger. Dem. Rep.  
 SO Zeitschrift fuer Chemie (1974), 14(10), 404-5  
 CODEN: ZECEAL; ISSN: 0044-2402  
 DT Journal  
 LA German  
 AB Reaction of RN:CR1NCS (I; R = Et, Bu, Ph, 4-BrC6H4, or 4-ClC6H4; R1 = Ph or 4-O2NC6H4) with EtO2CCHR2Na (II; R2 = CN, COMe, or CO2Et) gave 35-95% pyrimidines III. In the case of I (R = 4-ClC6H4, R1 = 4-O2-NC6H4; R = Ph, R1 = Et; R = R1 = Ph) and II (R2 = COMe), 25-65% pyrimidines IV were obtained.  
 IT **54715-44-5P 54715-45-6P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 54715-44-5 CAPLUS  
 CN 5-Pyrimidinecarbonitrile, 1,4,5,6-tetrahydro-6-oxo-1,2-diphenyl-4-thioxo- (9CI) (CA INDEX NAME)



RN 54715-45-6 CAPLUS  
 CN 5-Pyrimidinecarbonitrile, 1-(4-bromophenyl)-1,4,5,6-tetrahydro-6-oxo-2-phenyl-4-thioxo- (9CI) (CA INDEX NAME)



L18 ANSWER 99 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1974:514404 CAPLUS

DN 81:114404

TI Amine functions of reduced basicity. Hypoglycemic and natriuretic  $\alpha$ -alkoxybenzylamidoximes, amidines, and cycloamidines

AU Bailey, Denis M.; DeGrazia, C. George; Wood, David; Siggins, James; Harding, Homer R.; Potts, Gordon O.; Skulan, Thomas W.

CS Chem. Div., Sterling-Winthrop Res. Inst., Rensselaer, NY, USA

SO Journal of Medicinal Chemistry (1974), 17(7), 702-8

CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

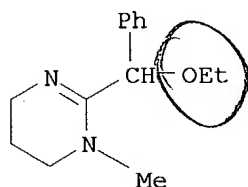
AB A series of 89 title compds. were prepared from the aryl aldehyde by conversion to the acetal, reaction with AcCl to give the chloro ether, and treatment with NaCN to give the nitrile. The nitrile was converted to the cyclic derivative by reaction with a diamine, to the amidoxime by reaction with hydroxylamine, or to the amidine via imidates or imidoyl chlorides. In vivo expts. showed some of the compds. to have hypoglycemic activity comparable to tolbutamide [64-77-7], and natriuretic activity comparable to hydrochlorothiazide [58-93-5]. 2-( $\alpha$ -Ethoxybenzyl)-1,4,5,6-tetrahydropyrimidine (I) [33235-81-3] had greatest separation of antidiabetic activity and toxicity, and had long-acting hypoglycemic activity. I was as potent as SKF 525 A [62-68-0] as an inhibitor of hepatic drug metabolizing enzymes. Activity in relation to basicity due to structure was discussed.

IT 33235-95-9P 33236-04-3P 52963-63-0P

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(preparation and pharmacol. of)

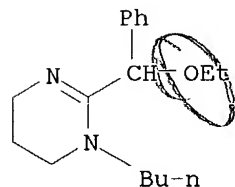
RN 33235-95-9 CAPLUS

CN Pyrimidine, 2-(ethoxyphenylmethyl)-1,4,5,6-tetrahydro-1-methyl- (9CI) (CA INDEX NAME)



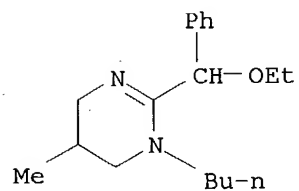
RN 33236-04-3 CAPLUS

CN Pyrimidine, 1-butyl-2-(ethoxyphenylmethyl)-1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)



RN 52963-63-0 CAPLUS

CN Pyrimidine, 1-butyl-2-(ethoxyphenylmethyl)-1,4,5,6-tetrahydro-5-methyl-  
(9CI) (CA INDEX NAME)

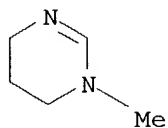


L18 ANSWER 100 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1974:513730 CAPLUS  
 DN 81:113730  
 TI Cycloamidine desensitizers for pressure-sensitive copy papers  
 IN Miyamoto, Akio; Matsukawa, Hiroharu  
 PA Fuji Photo Film Co., Ltd.  
 SO Ger. Offen., 23 pp.  
 CODEN: GWXXBX

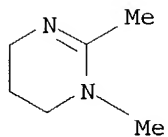
DT Patent  
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2361856	A1	19740620	DE 1973-2361856	19731212
	DE 2361856	C2	19820701		
	JP 49083509	A2	19740812	JP 1972-126861	19721218
	JP 56020197	B4	19810512		
	ES 421417	A1	19760416	ES 1973-421417	19731213
	GB 1427550	A	19760310	GB 1973-58177	19731214
	US 4012538	A	19770315	US 1975-563902	19750331
PRAI	JP 1972-126861		19721218		
	US 1973-425902		19731217		
AB	The derivs. of imidazolines or tetrahydropyrimidines and of a phenol or Cl-20 fatty acid, printed on an acid receptor sheet at 0.7-5 g/m <sup>2</sup> , are more efficient in preventing dye formation from encapsulated leuco dye layers than the known desensitizers. The compds. are readily soluble or dispersible in water and applicable by writing, spraying, offset, or gravure printing as compns. containing also a polymeric binder, pigment, solvent, lubricant, and offset inhibitor. Thus, a lacquer with 60 parts of a 4:1 reaction product of 1-methyl-1,4,5,6-tetrahydropyrimidine and acrylic acid and with 30 parts of a rosin-maleic anhydride-glyceride condensate was mixed on a 3-roller mill with TiO <sub>2</sub> 10 parts, and the viscosity adjusted to 200 P by addition of polyethylene glycol (mol. weight 400) to give the desensitizer composition				
IT	2304-03-2D, Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-, reaction products with acrylic acid 4271-96-9 45892-86-2D, Pyrimidine, 2-butyl-1,4,5,6-tetrahydro-1-methyl-, reaction products with salicylic acid 53517-92-3				
	RL: USES (Uses)				
	(desensitizer compns. containing, for pressure-sensitive copying paper)				
RN	2304-03-2 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)				

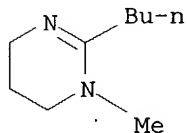


RN 4271-96-9 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



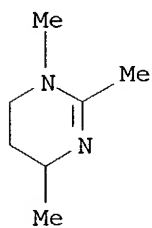
RN 45892-86-2 CAPLUS

CN Pyrimidine, 2-butyl-1,4,5,6-tetrahydro-1-methyl- (9CI) (CA INDEX NAME)



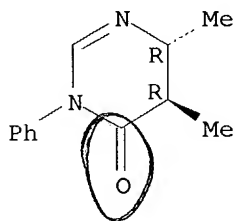
RN 53517-92-3 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1,2,4-trimethyl- (9CI) (CA INDEX NAME)

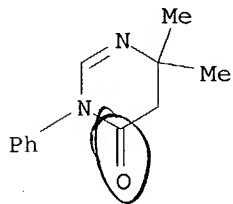


L18 ANSWER 101 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1974:108475 CAPLUS  
 DN 80:108475  
 TI Imidic esters and their reactions. 3. Reactions of 2-azetidinones with imidic esters  
 AU Bormann, Dieter  
 CS Farbwerke Hoechst A.-G., Frankfurt/M., Fed. Rep. Ger.  
 SO Chemische Berichte (1974), 107(1), 270-7  
 CODEN: CHBEAM; ISSN: 0009-2940  
 DT Journal  
 LA German  
 OS CASREACT 80:108475  
 AB Reaction of the azetidinones I with R<sub>3</sub>N:CR<sub>4</sub>OEt on heating gave the tetrahydropyrimidinones II (R-R<sub>2</sub> = H or Me; R<sub>3</sub> = H, Ph, Bu, 4-ClC<sub>6</sub>H<sub>4</sub>, cyclohexyl, or 2-pyridyl; R<sub>4</sub> = H, Me, or Ph). Similar reaction of the azetidinones I (R = OMe or O<sub>2</sub>CCHMe<sub>2</sub>, R<sub>1</sub> = R<sub>2</sub> = H) with PhN:CHOEt and the lactim ethers III gave the dihydropyrimidinones IV and V (N = 1 or 3), resp.  
 IT 52090-30-9P 52090-43-4P 52090-44-5P  
 52090-45-6P 52090-48-9P 52090-49-0P  
 52090-50-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 52090-30-9 CAPLUS  
 CN 4(3H)-Pyrimidinone, 5,6-dihydro-5,6-dimethyl-3-phenyl-, trans- (9CI) (CA INDEX NAME)

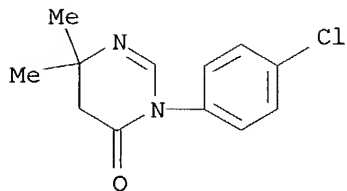
Relative stereochemistry.



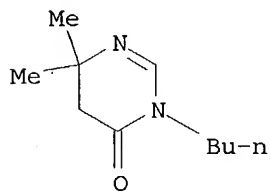
RN 52090-43-4 CAPLUS  
 CN 4(3H)-Pyrimidinone, 5,6-dihydro-6,6-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)



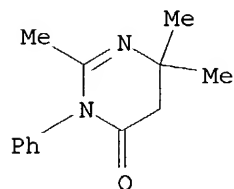
RN 52090-44-5 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-(4-chlorophenyl)-5,6-dihydro-6,6-dimethyl- (9CI)  
 (CA INDEX NAME)



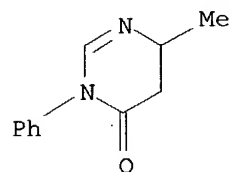
RN 52090-45-6 CAPLUS  
CN 4(3H)-Pyrimidinone, 3-butyl-5,6-dihydro-6,6-dimethyl- (9CI) (CA INDEX NAME)



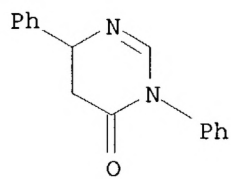
RN 52090-48-9 CAPLUS  
CN 4(3H)-Pyrimidinone, 5,6-dihydro-2,6,6-trimethyl-3-phenyl- (9CI) (CA INDEX NAME)



RN 52090-49-0 CAPLUS  
CN 4(3H)-Pyrimidinone, 5,6-dihydro-6-methyl-3-phenyl- (9CI) (CA INDEX NAME)

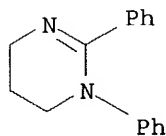


RN 52090-50-3 CAPLUS  
CN 4(3H)-Pyrimidinone, 5,6-dihydro-3,6-diphenyl- (9CI) (CA INDEX NAME)



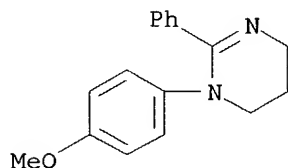


L18 ANSWER 102 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1974:95878 CAPLUS  
 DN 80:95878  
 TI Synthesis of 1,2-disubstituted-1,4,5,6-tetrahydropyrimidines  
 AU Perillo, Isabel; Lamdan, Samuel  
 CS Fac. Farm. Bioquim., Univ. Nac. Buenos Aires, Buenos Aires, Argent.  
 SO Journal of Heterocyclic Chemistry (1973), 10(6), 915-23  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DT Journal  
 LA English  
 AB Cyclization of benzoyl derivs. of N-substituted trimethylenediamines with polyphosphoric acid (PPA) or the corresponding ethyl ester (PPE), afforded 1,2-disubstituted-1,4,5,6-tetrahydropyrimidines I (R = Ph or substituted phenyl, naphthyl, cyclohexyl, R1 = Ph or p-C6H4NO2). PPE was the more advantageous reagent. The excessive protonation of the starting material and the cleavage of the ether function produced by PPA explains the failure of this reagent to cause ring closure in some cases. Synthesis of the starting materials is described. Anal. and spectroscopic data of the new compds. are presented.  
 IT **52289-23-3P 52289-26-6P 52289-27-7P 52289-28-8P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 52289-23-3 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-diphenyl- (9CI) (CA INDEX NAME)

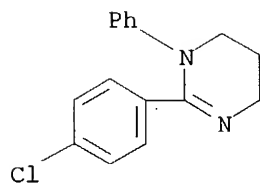


*Same*

RN 52289-26-6 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-(4-methoxyphenyl)-2-phenyl- (9CI) (CA INDEX NAME)

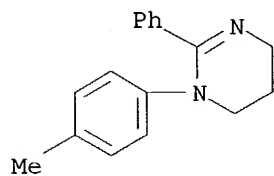


RN 52289-27-7 CAPLUS  
 CN Pyrimidine, 2-(4-chlorophenyl)-1,4,5,6-tetrahydro-1-phenyl- (9CI) (CA INDEX NAME)



RN 52289-28-8 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-(4-methylphenyl)-2-phenyl- (9CI) (CA  
INDEX NAME)



L18 ANSWER 103 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1973:478833 CAPLUS  
 DN 79:78833  
 TI Nitrogen-containing heterocyclics  
 IN White, Alan Chapman; Black, Robin Michael  
 PA John Wyeth and Brother Ltd.  
 SO Ger. Offen., 53 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2257784	A1	19730607	DE 1972-2257784	19721124
	GB 1366133	A	19740911	GB 1971-1250	19710111
	ZA 7108536	A	19720927	ZA 1971-8536	19711221
	JP 48039500	A2	19730609	JP 1972-5481	19720111
	JP 55031156	B4	19800815		
	ZA 7207999	A	19730829	ZA 1972-7999	19721113
	CA 1010448	A1	19770517	CA 1972-156588	19721116
	AU 7248992	A1	19740523	AU 1972-48992	19721117
	BE 792161	A1	19730530	BE 1972-124825	19721130
	IN 137718	A	19750906	IN 1972-2033	19721130
	FR 2162416	A1	19730720	FR 1972-43057	19721204
	AT 7210288	A	19750115	AT 1972-10288	19721204
	AT 325621	B	19751027		
	AT 7401334	A	19750115	AT 1974-1334	19721204
	AT 325625	B	19751027	AT 1972-325625	19721204
	JP 48064069	A2	19730905	JP 1972-121926	19721205
	NL 7216545	A	19730608	NL 1972-16545	19721206
	CH 575398	A	19760514	CH 1976-1258	19721206
	CH 575931	A	19760531	CH 1972-17725	19721206
	CH 576450	A	19760615	CH 1976-1259	19721206
	US 3891644	A	19750624	US 1973-361701	19730518
PRAI	GB 1971-1250	A	19710111		
	GB 1971-56467	A	19711206		
	GB 1971-40959	A	19711214		
	GB 1972-12069	A	19720315		
	US 1971-211105	A2	19711222		

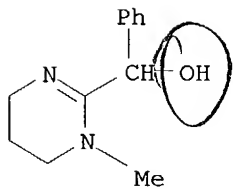
AB The diazaheterocycles I (X = CH<sub>2</sub>CH<sub>2</sub>, R = Ph, m-ClC<sub>6</sub>H<sub>4</sub>, p-ClC<sub>6</sub>H<sub>4</sub>, p-MeOC<sub>6</sub>H<sub>4</sub>, 2,6-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, o-BrC<sub>6</sub>H<sub>4</sub>, 1-naphthyl, R<sub>1</sub> = H, 4-Cl; X = CMe<sub>2</sub>CH<sub>2</sub>, CH(OH)CH<sub>2</sub>, CH<sub>2</sub>, (CH<sub>2</sub>)<sub>3</sub>, R = Ph, R<sub>1</sub> = H; X = CMe<sub>2</sub>, R = Ph, R<sub>1</sub> = H, 3-Cl) were prepared. Thus PhCH(OH)C(:NH)OEt was cyclized with H<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> to phenyl(1,4,5,6-tetrahydro-2-pyrimidinyl)methanol, which was oxidized to the ketone, and treated with PhMgBr to give I (X = CH<sub>2</sub>CH<sub>2</sub>, R = Ph, R<sub>1</sub> = H). I (X = CH<sub>2</sub>CH<sub>2</sub>, R = Ph, R<sub>1</sub> = H, 3-Cl, 4-Cl; X = CMe<sub>2</sub>, R = Ph, R<sub>1</sub> = H) were hypoglycemic in rats at 30 mg/kg orally. I (X = CH<sub>2</sub>CH<sub>2</sub>, R = 2,6-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, R<sub>1</sub> = H) was diuretic at the same dose.

IT **42734-30-5**

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (oxidation of)

RN 42734-30-5 CAPLUS

CN 2-Pyrimidinemethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -phenyl- (9CI)  
 (CA INDEX NAME)

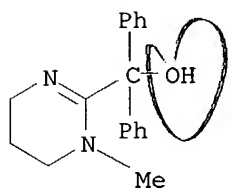


IT 42734-31-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 42734-31-6 CAPLUS

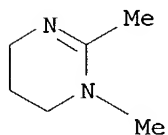
CN 2-Pyrimidinemethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha,\alpha$ -diphenyl-  
, monohydrobromide (9CI) (CA INDEX NAME)



● HBr

L18 ANSWER 104 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1973:453361 CAPLUS  
DN 79:53361  
TI Vinyl-substituted benzimidazoles  
IN Aries, Robert  
SO Fr., 9 pp.  
CODEN: FRXXAK  
DT Patent  
LA French  
FAN.CNT 1

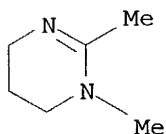
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	FR 2134809		19730112	FR 1971-14112	19710421
AB	The anthelmintic benzimidazolylvinylpyrimidine I was prepared by treating 2-formylbenzimidazole with 1,2-dimethyl-1,4,5,6-tetrahydropyrimidine.				
IT	<b>4271-96-9</b> RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with formylbenzimidazole)				
RN	4271-96-9 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)				



*Same*

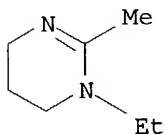
L18 ANSWER 105 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1973:442516 CAPLUS  
 DN 79:42516  
 TI Oxadiazabicycloalkenes  
 IN Magosch, Karl Heinz  
 PA Chemische Werke Huels A.-G.  
 SO Ger. Offen., 13 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2155753	A1	19730517	DE 1971-2155753	19711110
PRAI	DE 1971-2155753		19711110		
AB	Seven title compds. I (X = O, NMe, NEt, NBu, NCH <sub>2</sub> Ph, NPh; n = 2 or 3) were prepared by reaction of the heterocycles II with PhC.tplbond.NO or PhC(:NOH)Cl.				
IT	4271-96-9 4271-97-0 4335-66-4 41817-82-7				
	RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with benzohydroximoyl chloride)				
RN	4271-96-9 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)				

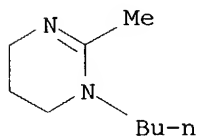


*Same*

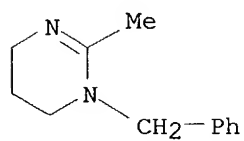
RN 4271-97-0 CAPLUS  
 CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 4335-66-4 CAPLUS  
 CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 41817-82-7 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



L18 ANSWER 106 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1973:432089 CAPLUS  
 DN 79:32089  
 TI Cyclic amidines  
 IN Magosch, Karl Heinz  
 PA Chemische Werke Huels A.-G.  
 SO Ger. Offen., 11 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

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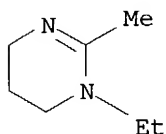
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2154948	A1	19730510	DE 1971-2154948	19711105
PRAI	DE 1971-2154948		19711105		

AB Fourteen cyclic amidines I (R = H, alkyl, CH<sub>2</sub>CH<sub>2</sub>OH, or CH<sub>2</sub>Ph; R<sub>1</sub> = alkyl or Ph; n = 2 or 3) were prepared by reaction of the oxazolines II with RNH(CH<sub>2</sub>)<sub>n</sub>NH<sub>2</sub> at elevated temps. Thus, heating ethylenediamine and II (R<sub>1</sub> = Me) under N 5 hr at 200°/10 atm gave 61% I (R = H, R<sub>1</sub> = Me, n = 2).

IT **4271-97-0P 4335-66-4P 35739-39-0P**  
**35739-40-3P 35739-41-4P 35739-42-5P**  
**41715-14-4P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

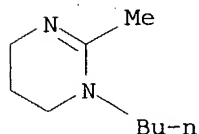
RN 4271-97-0 CAPLUS

CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 4335-66-4 CAPLUS

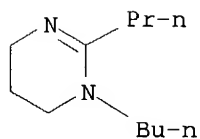
CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



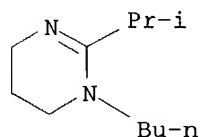
RN 35739-39-0 CAPLUS

CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-propyl- (9CI) (CA INDEX NAME)

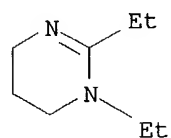




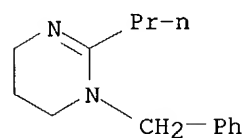
RN 35739-40-3 CAPLUS  
CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-(1-methylethyl)- (9CI) (CA INDEX NAME)



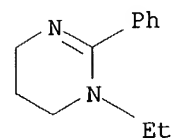
RN 35739-41-4 CAPLUS  
CN Pyrimidine, 1,2-diethyl-1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)



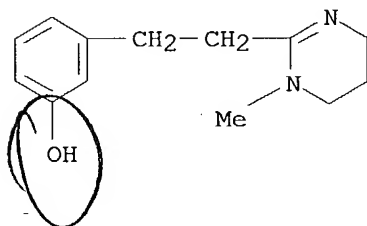
RN 35739-42-5 CAPLUS  
CN Pyrimidine, 1,4,5,6-tetrahydro-1-(phenylmethyl)-2-propyl- (9CI) (CA INDEX NAME)



RN 41715-14-4 CAPLUS  
CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-phenyl- (9CI) (CA INDEX NAME)



L18 ANSWER 107 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1972:413880 CAPLUS  
 DN 77:13880  
 TI Novel anthelmintic agents. 6. Pyrantel analogs with activity against  
 whipworm  
 AU McFarland, James W.; Howes, Harold L., Jr.  
 CS Pfizer Med. Res. Lab., Groton, CT, USA  
 SO Journal of Medicinal Chemistry (1972), 15(4), 365-8  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DT Journal  
 LA English  
 AB Of a series of 35 pyrantel analogs, synthesized by standard methods,  
 trans-1,4,5,6-tetrahydro-2-(3-hydroxystyryl)-1-methylpyrimidine-HCl  
 (I-HCl) [34834-86-1], trans-1-(3-hydroxystyryl)pyridinium bromide (II)  
 [26154-97-2], trans-1-(3-benzoyloxystyryl)pyridinium bromide (III).  
 [34834-87-2], trans-3-hydroxy-N,N-dimethylcinnamamide-HCl [35112-42-6],  
 and trans-2-(3-benzoyloxystyryl)-1,4,5,6-tetrahydro-1-methylpyrimidine  
 fumarate (IV fumarate) [35112-43-7] exhibited the highest nematocidal  
 activity against whipworm (*Trichuris muris*) infestation in mice. Compds.  
 with styryl side chains were more potent than corresponding phenethyl  
 analogs, while N-methyl substituted compds. were more potent than  
 corresponding unsubstituted derivs. Tetrahydropyrimidines were more  
 active than corresponding imidazolines. The meta OH substituent was not  
 essential for activity, but made a major contribution to anthelmintic  
 potency.  
 IT **37089-24-0**  
 RL: BIOL (Biological study)  
 (Trichuris muris infestation treatment by)  
 RN 37089-24-0 CAPLUS  
 CN Phenol, 3-[2-(1,4,5,6-tetrahydro-1-methyl-2-pyrimidinyl)ethyl]-,  
 monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L18 ANSWER 108 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1972:405508 CAPLUS  
 DN 77:5508  
 TI Controlling helminthiasis with cyclic amidines  
 IN Conover, Lloyd H.; McFarland, James W.; Austin, William C.  
 PA Pfizer Inc.  
 SO U.S., 13 pp. Continuation-in-part of U.S. 3,549,624 (CA 75;5937u).  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

*Isomel*  
 103

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3644624	A	19720222	US 1969-870750	19691105
PRAI	US 1969-870750		19691105		

AB Thienylimidazolines and -pyrimidines I (R = H, Me; R1 = H, Me, Et, Br; X = CH2CH2, (CH2)3, CH:CH; n = 0, 1) and their acid salts, useful as anthelmintics in livestock, are prepared by cyclizing thienylalkylimidates with H2NCH2CH2NH2 or H2N(CH2)3NH2 in alkaline media. -Methyl-2-[2-(3-thienyl)vinyl]-Δ2-tetrahydropyrimidine and 1-methyl-2-[2-(3-thienyl)ethyl]-Δ2-tetrahydropyrimidine were also prepared Thus, 8.5 g Me 2-(2-thienyl)propionimide-HCl was refluxed 1.5 hr with H2NCH2CH2NH2 in MeOH to give I-HCl (R = R1 = H, X = CH2CH2, n = 2), having ED90 mice = 100 mg/kg for 3 days (oral).

IT **5671-30-7P 5671-33-0P 5685-90-5P**  
**5722-14-5P 5822-06-0P 32079-97-3P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

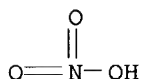
RN 5671-30-7 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-, mononitrate (8CI, 9CI) (CA INDEX NAME)

CM 1

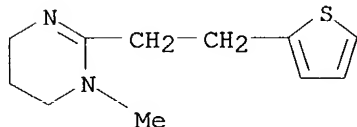
CRN 7697-37-2

CMF H N O3



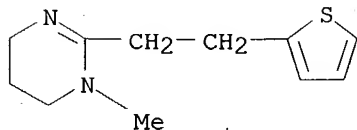
CM 2

CRN 5685-90-5  
 CMF C11 H16 N2 S



RN 5671-33-0 CAPLUS

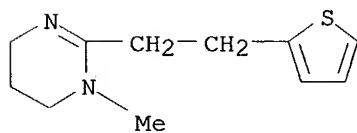
CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-,  
monohydrochloride (8CI, 9CI) (CA INDEX NAME)



● HCl

RN 5685-90-5 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]- (8CI, 9CI)  
(CA INDEX NAME)



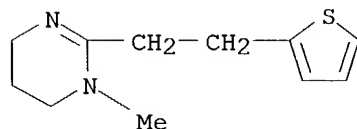
RN 5722-14-5 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-,  
mono(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)

CM 1

CRN 5685-90-5

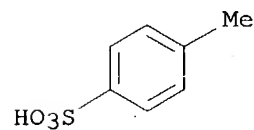
CMF C11 H16 N2 S



CM 2

CRN 104-15-4

CMF C7 H8 O3 S

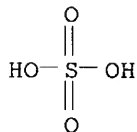


RN 5822-06-0 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-, sulfate  
 (1:1) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9

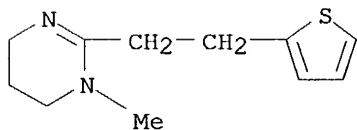
CMF H2 O4 S



CM 2

CRN 5685-90-5

CMF C11 H16 N2 S

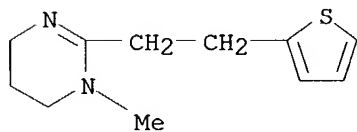


RN 32079-97-3 CAPLUS  
 CN Benzenesulfonic acid, 2,2'-(1,2-ethenediyl)bis[5-amino-, compd. with  
 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]pyrimidine (1:2) (9CI)  
 (CA INDEX NAME)

CM 1

CRN 5685-90-5

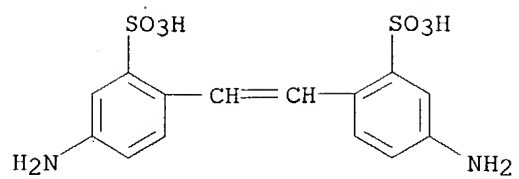
CMF C11 H16 N2 S



CM 2

CRN 81-11-8

CMF C14 H14 N2 O6 S2



L18 ANSWER 109 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1972:148743 CAPLUS

DN 76:148743

TI Anthelmintic activity in sheep of some compounds related to pyrantel and morantel

AU Austin, W. C.; Cornwell, R. L.; Jones, R. M.; Robinson, M.

CS Res. Div., Pfizer Ltd., Sandwich/Kent, UK

SO Journal of Medicinal Chemistry (1972), 15(3), 281-5

CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

AB Pyrantel (I) [15686-83-6] (25 mg/kg) and morantel (II) [20574-50-9] (10 mg/kg) are the most active against major nematode infections in sheep (i.e. *Haemonchus contortus*, *Trichostrongylus colubriformis*, *Nematodirus battus*) compared with 34 cyclic amidines previously reported (McFarland, 1969, 1970) for the *Nematospiroides dubius* rodent screen. Structural characteristics of thienylvinyl cyclic amidines resulting in increased activity were; larger basic ring ( $n = 2$ ), methylation of N (R1), maintenance of the trans vinyl linkage and 2-thienyl linkage. Replacement of the thiophene ring with a phenyl ring decreased activity; however, in a series of styryl tetrahydropyrimidines (III), ortho substitution with Me, Cl, and Br gave more active compds. in sheep than the unsubstituted compound. In a series of pyridinium salts (IV) most of the structure activity relations established in other series held true, but this series was less potent than the pyrantel series.

IT 5722-14-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anthelmintic activity of)

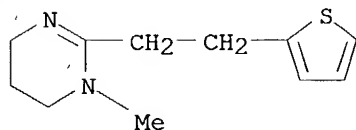
RN 5722-14-5 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-, mono(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)

CM 1

CRN 5685-90-5

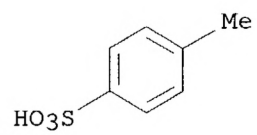
CMF C11 H16 N2 S



CM 2

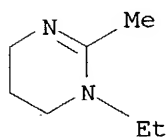
CRN 104-15-4

CMF C7 H8 O3 S



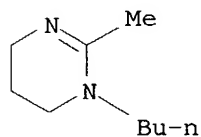


L18 ANSWER 110 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1972:113164 CAPLUS  
 DN 76:113164  
 TI  $\Delta^2$ -Imidazolines and 1,4,5,6-tetrahydropyrimidines from  
 $\Delta^2$ -1,3-oxazolines  
 AU Magosch, K. H.  
 CS Forschungslab., Chem. Werke Hues A.-G., Marl, Fed. Rep. Ger.  
 SO Synthesis (1972), (1), 37  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DT Journal  
 LA German  
 AB -Alkyl- $\Delta^2$ -1,3-oxazolines (I, R = alkyl) were treated with  
 $H_2N(CH_2)_nNHR_1$  ( $n = 2, 3$ ;  $R_1 = H$ , alkyl) to give  $\Delta^2$ -imidazolines (II)  
 and 1,4,5,6-tetrahydropyrimidines (III), resp.  
 IT **4271-97-0P 4335-66-4P 35739-39-0P**  
**35739-40-3P 35739-41-4P 35739-42-5P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 4271-97-0 CAPLUS  
 CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA  
 INDEX NAME)

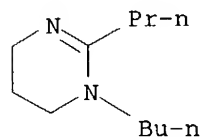


*Sum*

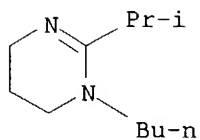
RN 4335-66-4 CAPLUS  
 CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA  
 INDEX NAME)



RN 35739-39-0 CAPLUS  
 CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-propyl- (9CI) (CA INDEX NAME)

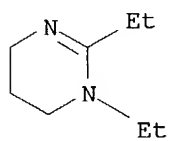


RN 35739-40-3 CAPLUS  
 CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-(1-methylethyl)- (9CI) (CA INDEX  
 NAME)



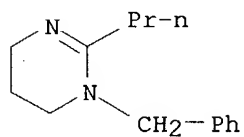
RN 35739-41-4 CAPLUS

CN Pyrimidine, 1,2-diethyl-1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)



RN 35739-42-5 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-(phenylmethyl)-2-propyl- (9CI) (CA INDEX NAME)



L18 ANSWER 111 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1971:449154 CAPLUS  
 DN 75:49154  
 TI 1,3-Diaza-2-cycloalkenes  
 PA Sterling Drug Inc.  
 SO Brit., 21 pp.  
 CODEN: BRXXAA  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 1230347		19710428		
	US 3657229		19720000	US	
	US 3897431		19750000	US	
PRAI	US		19680502		

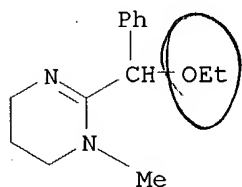
AB The title compds. (I and analogs), derivs. of imidazoline, pyrimidine, and 1,3-diazepine, antiinflammatory, hypoglycemic, and (except the imidazolines) diuretic drugs, are prepared by treating  $\text{ArCR(OR1)CN}$  (II, R = H or lower alkyl or alkenyl, R1 = lower alkyl) with  $\text{Y(NH2)NHR2}$  (Y = C2-4 alkylene, R2 = H or lower alkyl), in the presence of a catalytic amount of  $\text{CS2}$  or  $\text{H2S}$ . Thus,  $\text{PhCH(OEt)CN}$ ,  $\text{C2H4(NH2)2}$ , and  $\text{CS2}$  was heated to give I ( $n = 2$ ). Similarly prepared were I ( $n = 3$ ), and I ( $n = 4$ ). Many other examples were given. Processes for preparing II from  $\text{ArCHO}$  via  $\text{ArCH(OR1)2}$  and  $\text{ArCHCl(OR1)}$ , to give II (R = H), or via  $\text{ArCR(OR1)CONH2}$ , were also given.

IT 33235-95-9P 33236-04-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

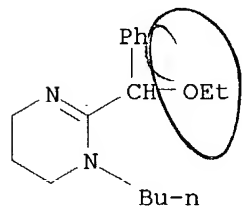
RN 33235-95-9 CAPLUS

CN Pyrimidine, 2-(ethoxyphenylmethyl)-1,4,5,6-tetrahydro-1-methyl- (9CI) (CA INDEX NAME)



RN 33236-04-3 CAPLUS

CN Pyrimidine, 1-butyl-2-(ethoxyphenylmethyl)-1,4,5,6-tetrahydro- (9CI) (CA INDEX NAME)



L18 ANSWER 112 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1971:405937 CAPLUS  
 DN 75:5937  
 TI Anthelmintic 2-substituted-2-Δ2-tetrahydropyrimidines and  
 Δ2-imidazolines  
 IN Conover, Lloyd H.; McFarland, James W.; Austin, William C.  
 PA Pfizer, Chas., and Co., Inc.  
 SO U.S., 14 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3549624	A	19701222	US 1967-661220	19670817
PRAI	US 1967-661220		19670817		

AB The title anthelmintic agents are prepared Thus, a mixture of  
 3-(2-thienyl)propionitrile, ethylenediamine (I), and p-MeC6H4SO3H.H2O is  
 heated 8 hr at 175° to give the toluenesulfonate salt which on  
 treatment with alkali yields 2-[2-(2-thienyl)ethyl]-Δ2-imidazoline,  
 m. 99-101°. Similarly, 2-[2-(2-thienyl)ethyl]-Δ2-  
 tetrahydropyrimidine is prepared by substituting trimethylenediamine for I.  
 An addnl. 29 examples are described plus formulations.

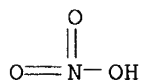
IT **5671-30-7P 5671-33-0P 5685-90-5P**  
**5722-14-5P 5822-06-0P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 5671-30-7 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-,  
 mononitrate (8CI, 9CI) (CA INDEX NAME)

CM 1

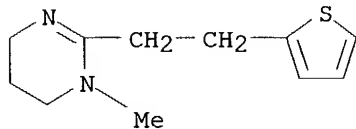
CRN 7697-37-2  
 CMF H N O3

*Same as before*



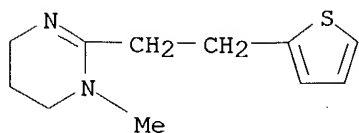
CM 2

CRN 5685-90-5  
 CMF C11 H16 N2 S



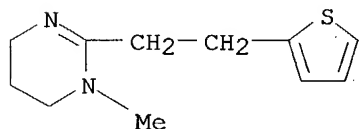
RN 5671-33-0 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-,

monohydrochloride (8CI, 9CI) (CA INDEX NAME)



● HCl

RN 5685-90-5 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]- (8CI, 9CI)  
(CA INDEX NAME)

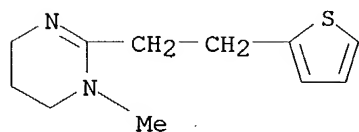
RN 5722-14-5 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-,  
mono(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)

CM 1

CRN 5685-90-5

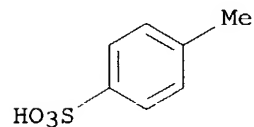
CMF C11 H16 N2 S



CM 2

CRN 104-15-4

CMF C7 H8 O3 S



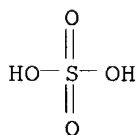
RN 5822-06-0 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-, sulfate  
(1:1) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9

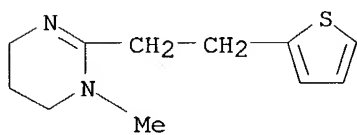
CMF H2 O4 S



CM 2

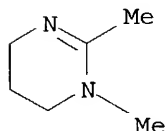
CRN 5685-90-5

CMF C11 H16 N2 S



L18 ANSWER 113 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1971:126812 CAPLUS  
DN 74:126812  
TI Tetrahydropyrimidine salts to accelerate urethane formation  
IN Hashimoto, Tadashi; Nakatani, Keiso; Suzuki, Shoji; Daigo, Hiroshi;  
Fujino, Kazuzo  
PA Sanabot Yugen Kaisha  
SO Jpn. Tokkyo Koho, 8 pp.  
CODEN: JAXXAD  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 46002672	B4	19710122	JP	19670707
AB	The formation of urethane foams having $\geq 1$ active H determined by a Zerewitinoff method with compds. having $-N:C:Y$ (where Y is O or S) radicals was accelerated by the addition of tetrahydropyrimidine salts. For example, Silicone L-520 1.5, H <sub>2</sub> O 4.5, 1,2-dimethyl-1,4,5,6-tetrahydropyrimidine (I) 0.1, and stannous octoate 0.4 part were added to 100 parts polyalkylene polyol (glycerol + propylene oxide, mol. weight 3000), and 54.8 parts tolylene diisocyanate, stirred 10 sec at 3000 rpm, and cast in a mold to give a urethane foam of density 23.3 kg/cm <sup>3</sup> .				
IT	4271-96-9 RL: CAT (Catalyst use); USES (Uses) (catalysts, for urethane polymer foams)				
RN	4271-96-9 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)				



*Same*

L18 ANSWER 114 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1971:22840 CAPLUS  
 DN 74:22840  
 TI Cyclic formamidines  
 IN Becke, Friedrich; Paessler, Peter; Swoboda, Otto P.  
 PA Badische Anilin- & Soda-Fabrik AG  
 SO Ger. Offen., 7 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1922802	A	19701119	DE 1969-1922802	19690505
	FR 2047192	A5	19710312	FR 1970-16019	19700430
	NL 7006486	A	19701109	NL 1970-6486	19700501
	BE 749968	A	19701105	BE 1970-749968	19700505
PRAI	DE 1969-1922802		19690505		

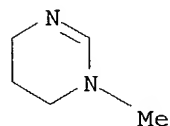
AB The title compds. (I), useful for pharmaceuticals and insecticides, were prepared by passing  $\text{OHCNHCHR}(\text{CH}_2)_n\text{NHCHO}$  (II) at  $400-600^\circ$  over a silica gel catalyst. Thus, a quartz tube containing 300 ml catalyst consisting of silica gel of 90 pores of  $20-400 \text{ \AA}$  diameter and  $314 \text{ m}^2/\text{g}$  sp. surface and 1%  $\text{TiO}_2$  was charged at  $500^\circ$  and  $35-40 \text{ mm}$  with  $310 \text{ g}$  II ( $\text{R} = \text{H}$ ,  $n = 1$ )/hr of  $150^\circ$  to give 84% I ( $\text{R} = \text{H}$ ,  $n = 1$ ). Similarly prepared were I ( $\text{R}$ ,  $n$ , and % yield given): Me, 1, 71.5; H, 2, 79; H, 3, 48.

IT **2304-03-2P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 2304-03-2 CAPLUS

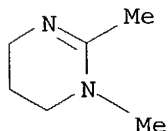
CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



*Same*



L18 ANSWER 115 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1970:424480 CAPLUS  
DN 73:24480  
TI Homoallylic coupling in hetero systems  
AU Buxton, P. C.; Uff, B. C.  
CS Loughborough Univ. Technol., Loughborough, UK  
SO Summaries of Final Year Student Project Theses - Loughborough University,  
Department of Chemistry (1969), 10, 133-4  
CODEN: LSFYA6; ISSN: 0368-8070  
DT Journal  
LA English  
AB 2,3-Dimethyl-3,4,5,6-tetrahydropyrimidine (I) and 1-methyl-7-nitro-3,4-  
dihydroisoquinoline (II) gave homoallylic proton couplings across the  
system HCC:NCH of 1.05 Hz at 100 MHz and 1.50 Hz at 60 MHz, resp.  
Stereochem. consequences are discussed. Impure 2-methyl- $\Delta^1$ -  
pyrroline-3-carboxamide was prepared by alkylation of Et acetoacetate with  
ethylene dibromide followed by cyclization with NH<sub>3</sub>.  
IT **4271-96-9**  
RL: PRP (Properties)  
(nuclear magnetic resonance of)  
RN 4271-96-9 CAPLUS  
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX  
NAME)



*Same*

L18 ANSWER 117 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1970:2508 CAPLUS

DN 72:2508

TI Novel anthelmintic agents. II. Pyrantel and other cyclic amidines

AU McFarland, James W.; Conover, L. H.; Howes, Harold L., Jr.; Lynch, J. E.; Chisholm, D. R.; Austin, W. C.; Cornwell, R. L.; Danilewicz, J. C.; Courtney, W.; Morgan, D. H.

CS Pfizer Med. Res. Lab., Groton, CT, USA

SO Journal of Medicinal Chemistry (1969), 12(5), 1066-79

CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

AB Broad spectrum anthelmintic activity was discovered in a novel series of imidazolines and tetrahydropyrimidines substituted variously at the 2 positions by 2-arylethyl or 2-arylvinyl groups. One member of this series, trans-1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)-vinyl]pyrimidine tartrate (pyrantel tartrate), has gained acceptance as a veterinary anthelmintic agent in many areas of the world. The decreasing order of potency for the various aryl systems is 2-thienyl > 3-thienyl > phenyl > 2-furyl. The arylvinyl analog is usually more potent than the corresponding arylethyl compound. N-Methyl substitution on the cyclic amidine system invariably results in increased potency; substitution at almost any other position results in the loss of potency or of activity altogether. One notable exception is that certain substituents can be placed at the ortho position of the aryl system without detriment to anthelmintic activity, and in some cases enhanced potency is achieved. Thus, besides pyrantel, some of the more potent compds. in this series are trans-1,4,5,6-tetrahydro-1-methyl-2-[(3-methyl-2-thienyl)vinyl]pyrimidine, trans-1,4,5,6-tetrahydro-1-methyl-2-(2-methylstyryl)pyrimidine, trans-2-(2-bromostyryl)-1,4,5,6-tetrahydro-1-methylpyrimidine, and trans-2-(2-chlorostyryl)-1,4,5,6-tetrahydro-1-methylpyrimidine.

IT 5685-90-5 21446-82-2 21446-85-5

21446-93-5 26016-22-8 26016-24-0

26016-25-1 26016-27-3 26016-34-2

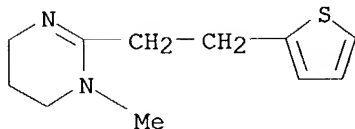
26038-58-4 26038-59-5 26133-47-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anthelmintic activity of)

RN 5685-90-5 CAPLUS

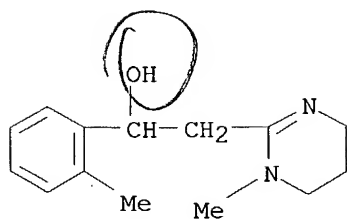
CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]- (8CI, 9CI)  
(CA INDEX NAME)



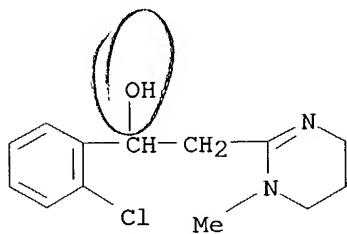
*Same*

RN 21446-82-2 CAPLUS

CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -o-tolyl- (8CI)  
(CA INDEX NAME)

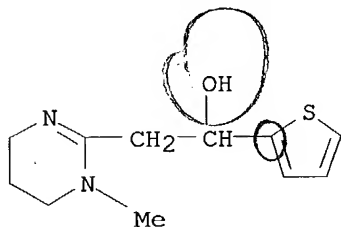


RN 21446-85-5 CAPLUS  
 CN 2-Pyrimidineethanol,  $\alpha$ -(o-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl-, monohydrochloride (8CI) (CA INDEX NAME)



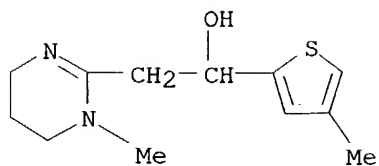
● HCl

RN 21446-93-5 CAPLUS  
 CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -2-thienyl-, monohydrochloride (8CI) (CA INDEX NAME)



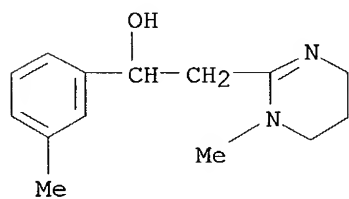
● HCl

RN 26016-22-8 CAPLUS  
 CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -(4-methyl-2-thienyl)-, monohydrochloride (8CI) (CA INDEX NAME)



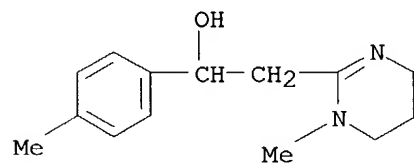
● HCl

RN 26016-24-0 CAPLUS  
CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -m-tolyl-,  
monohydrochloride (8CI) (CA INDEX NAME)



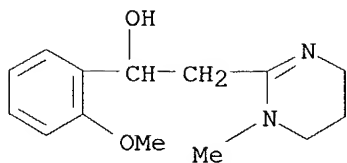
● HCl

RN 26016-25-1 CAPLUS  
CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -p-tolyl-,  
monohydrochloride (8CI) (CA INDEX NAME)



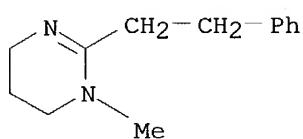
● HCl

RN 26016-27-3 CAPLUS  
CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro- $\alpha$ -(o-methoxyphenyl)-1-methyl-,  
monohydrochloride (8CI) (CA INDEX NAME)

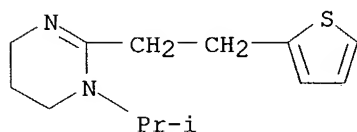


● HCl

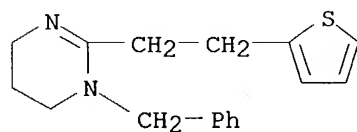
RN 26016-34-2 CAPLUS  
CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-phenethyl- (8CI) (CA INDEX NAME)



RN 26038-58-4 CAPLUS  
CN Pyrimidine, 1,4,5,6-tetrahydro-1-isopropyl-2-[2-(2-thienyl)ethyl]- (8CI) (CA INDEX NAME)

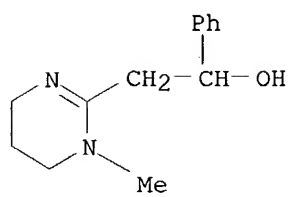


RN 26038-59-5 CAPLUS  
CN Pyrimidine, 1-benzyl-1,4,5,6-tetrahydro-2-[2-(2-thienyl)ethyl]-, monohydrochloride (8CI) (CA INDEX NAME)



● HCl

RN 26133-47-1 CAPLUS  
CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl-α-phenyl-, monohydrochloride (8CI) (CA INDEX NAME)



● HCl

L18 ANSWER 118 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1969:403613 CAPLUS

DN 71:3613

TI Mercuric bromide rearrangement and 1- $\beta$ -D-ribofuranosyl-4,6-pyrimidinedione, an isomer of uridine

AU Wigler, Paul W.; Lee, Hyun Jae

CS Univ. of Tennessee, Knoxville, TN, USA

SO Biochemistry (1969), 8(4), 1344-50

CODEN: BICHAW; ISSN: 0006-2960

DT Journal

LA English

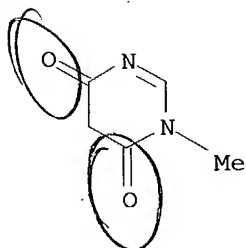
AB The conformation of the pyrimidine ring in a uridine isomer, 1- $\beta$ -D-ribofuranosyl-4,6-pyrimidinedione (isouridine) (I), is opposite to the pyrimidine conformation of 1- $\beta$ -D-ribofuranosyluracil. Condensation of 2 molar equivs. 2,3,5-tri-O-benzoyl-D-ribofuranosyl chloride with 4,6-pyrimidinedione-mercury gave the 4,6-bis(2,3,5-tri-O-benzoyl-D-ribofuranosyl) derivative of 4,6-dihydroxypyrimidine. This was converted into the 1,4-bis(2,3,5-tri-O-benzoyl-D-ribofuranosyl) derivative of 4-hydroxy-6-pyrimidinone by the HgBr<sub>2</sub> rearrangement; mild alkaline degradation of this gave I. The position of the glycosyl bond in I and the  $\beta$ -D-configurational assignment were confirmed by the conversion of I into 5',6-anhydro-2',3'-O-isopropylideneisouridine.

IT **24391-38-6P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 24391-38-6 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L18 ANSWER 119 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1969:57880 CAPLUS

DN 70:57880

TI Substituted pyrimidines and imidazolines useful as intermediates for making anthelmintic agents

IN McFarland, James W.

PA Pfizer, Chas., and Co., Inc.

SO S. African, 36 pp.

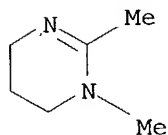
CODEN: SFXXAB

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	ZA 6801182		19680716		
	FR 94634			FR	
	GB 1184376			GB	
PRAI	US		19670224		
AB	I-IV which are valuable anthelmintic agents, are prepared by reacting an aldehyde with a cyclic amidine in the presence of a basic catalyst (e.g. NH <sub>3</sub> or an amine) at temps. <50°, and dehydrating the product with an acid dehydrating agent such as Ac <sub>2</sub> O. To a solution of 2240 g. freshly distilled thiophene-2-carboxaldehyde in 3 l. EtOAc is added with stirring a solution of 1120 g. 1,2-dimethyl-1,4,5,6-tetrahydro-pyrimidine in 3 l. EtOAc. The mixture is allowed to stand at room temperature 41 hrs. To this mixture is added 6.01 l. MeCN. The mixture is then cooled to 10°. The pH of the mixture is then adjusted to pH 4 with anhydrous HCl keeping the temperature <20°. The mixture was then cooled to 0°C. 1 hr. to give 57.4% II (R = Me, Y = 2-thienyl), m. 140-3°; HCl salt m. 162-3°. Prepared were the following (compound, R1, Y, and m.p. given): II, Me, 2-thienyl, 82-3°; I, H, 3-MeC <sub>6</sub> H <sub>4</sub> , -; I, Me, 2-MeC <sub>6</sub> H <sub>4</sub> , - (HCl, m. 161-3°); II, H, 2-furyl, -; II, Me, 2-ClC <sub>6</sub> H <sub>4</sub> , - (HCl, m. 185-7°); III, Me, 2-MeC <sub>6</sub> H <sub>4</sub> , - (PF <sub>6</sub> , m. 189-90°); IV, Me, 2-MeC <sub>6</sub> H <sub>4</sub> , - (sesquihydrochloride m. 184-6°); IV, Me, 2-thienyl, - (HCl, m. 195-6°); IV, Me, 2-ClC <sub>6</sub> H <sub>4</sub> , -; IV, Me, 3-bromo-2-thienyl, -; IV, Me, 3-ethyl-2-thienyl, -.				
IT	<b>4271-96-9P 21446-81-1P</b> , 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -2-thienyl- <b>21446-82-2P</b> <b>21446-85-5P 21446-93-5P</b> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)				
RN	4271-96-9 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)				

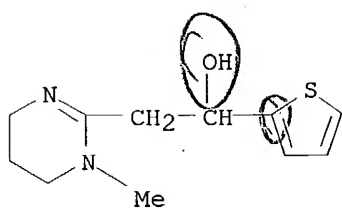


*Same*

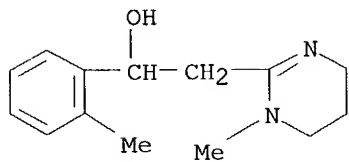
RN 21446-81-1 CAPLUS

CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -2-thienyl- (8CI)  
(CA INDEX NAME)

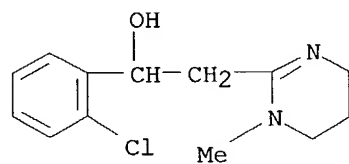




RN 21446-82-2 CAPLUS

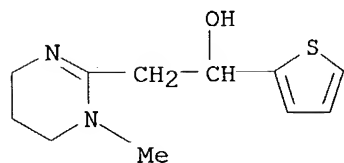
CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -o-tolyl- (8CI)  
(CA INDEX NAME)

RN 21446-85-5 CAPLUS

CN 2-Pyrimidineethanol,  $\alpha$ -(o-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl-,  
monohydrochloride (8CI) (CA INDEX NAME)

● HCl

RN 21446-93-5 CAPLUS

CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -2-thienyl-,  
monohydrochloride (8CI) (CA INDEX NAME)

● HCl

L18 ANSWER 120 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1969:47483 CAPLUS

DN 70:47483

TI 2-[ $\omega$ -(3-Methyl-2-thienyl)alkyl]- and 2-[2-(3-methyl-2-thienyl)vinyl]-  
 $\Delta^2$ -tetrahydropyrimidines and - $\Delta^2$ -imidazolines

IN Austin, William C.; Conover, Lloyd H.; McFarland, James W.

PA Pfizer Corp.

SO S. African, 32 pp.

CODEN: SFXAB

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	ZA 6602855		19680104	ZA	19660517
	DE 1745778			DE	

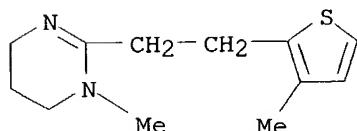
AB The title compds. (I) are prepared by (a) reaction of an alkylenediamine tosylate with the desired  $\omega$ -(3-methyl-2-thienyl)-substituted nitrile (II) or (b) the imino-ether-HCl of II is reacted with an alkylenediamine (III) or (c) an ester of  $\omega$ -(3-methyl-2-thienyl)alkanoic acid is reacted with III. When X is vinylene, I is also prepared by reaction of (3-methyl-2-thienyl)-acrylamide with 1,3-propanesultone to give 3-[1-imino-3-(3-methyl-2-thienyl)alkyloxy]propanesulfonic acid which is then reacted with III. Thus, a solution of 1.1 moles of 3-methylthiophene-2-carboxaldehyde, 1.0 mole  $\text{NCCH}_2\text{CO}_2\text{H}$ , 3 g.  $\text{NH}_4\text{OAc}$ , 110 ml. pyridine, and 200 ml. toluene was heated 48 hrs. to give a colorless oil, 3-(3-methyl-2-thienyl)acrylonitrile (IV), b0.05-0.10 76°, n<sub>D</sub>24 1.6330. IV was hydrogenated to give 3-(3-methyl-2-thienyl)propionitrile, b0 08-0.10 66°. To 31.8 g. Me  $\beta$ -(3-methyl-2-thienyl)propionimide-HCl is added a solution of 18.5 g.  $\text{MeNH}(\text{CH}_2)_3\text{NH}_2$  in 250 ml. MeOH at 0° and refluxed. The free base reacted with an equimolar amount of hexafluorophosphoric acid to give I (X =  $\text{CH}_2\text{CH}_2$ , R = Me, n = 2) hexafluoro-phosphonate salt, m 116.5-17.5°. Similar I prepared were (X, R, n, m.p., and salt given): CH:CH, H, 2, 239-41°, HCl:  $\text{CH}_2\text{CH}_2$ , Me, 1, - (oil), -

IT **21786-23-2P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

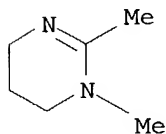
RN 21786-23-2 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(3-methyl-2-thienyl)ethyl]-  
(8CI) (CA INDEX NAME)



*Same*

L18 ANSWER 121 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1968:418371 CAPLUS  
DN 69:18371  
TI Fluoride catalysis of the Knoevenagel reaction  
AU Lelean, P. M.; Morris, J. A.  
CS Pfizer Ltd., Sandwich, UK  
SO Chemical Communications (London) (1968), (5), 239  
CODEN: CCOMA8; ISSN: 0009-241X  
DT Journal  
LA English  
AB The catalytic effect of various metallic fluorides on the condensation of thiophene-2-carboxaldehyde with 1,2-dimethyl-1,4,5,6-tetrahydropyrimidine was investigated. No activity was observed with Li, K, Cs, Fe(III), or Ni fluorides, some activity was noted for Na, Mg, Ca, Zn, Ba, Al, Ce, and Pb(II), while considerable activity is shown by SnF2. The dehydration stage, which is the rate-determining step, is considerably accelerated by addition of SnF2 while the coupling rate is only doubled by addition of SnF2.  
IT **4271-96-9**  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(Knoevenagel reaction of, with 2-thiophenecarboxaldehyde, fluorides as catalysts for)  
RN 4271-96-9 CAPLUS  
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



*Same*

L18 ANSWER 122 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1967:490828 CAPLUS  
 DN 67:90828  
 TI Derivatives of 1,3-diaza 2-cycloalkene  
 IN Blatter, Herbert M.  
 PA CIBA Corp.  
 SO U.S., 4 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3332948		19670725	US	19630620

AB Title derivs. (I) having diuretic and natriuretic properties were prepared Thus, a mixture of 127.0 g. N-(2-bromoethyl)phthalimide and 123.0 g. m-anisidine is heated on a steam bath to give a solid, the solid diluted with H<sub>2</sub>O, the mixture extracted with Et<sub>2</sub>O, and the solution cooled overnight to give 90.0 g. crude N-[2-[(3-methoxyphenyl)amino]ethyl]phthalimide (II), m. 99-103° (cyclohexane). A mixture of 35.0 g. II and 6.5 g. 99-100% N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O in 500 ml. 95% EtOH was refluxed 21 hrs., the solid filtered off, and the filtrate concentrated to give more solid product. The combined crops were dissolved in a mixture of 200 ml. 20% aqueous NaOH and 200 ml. H<sub>2</sub>O, the solution was extracted with CH<sub>2</sub>Cl<sub>2</sub>, and the extract dried and concentrated to give

N-(3-methoxyphenyl)ethylenediamine (III), m. 45-6° (hexane). A mixture of 1 g. III and 5 ml. tri-Et orthopropionate (IV) was heated 3 hrs. at 190-200° under N, the generated EtOH allowed to evaporate, the excess IV distilled, the residue extracted with boiling pentane, and the extract

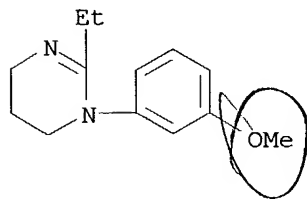
decolorized with C and evaporated The resulting compound (V) (R<sub>1</sub> = 3-OMe, R<sub>2</sub> = Et) was dissolved in Et<sub>2</sub>O and the solution treated with a concentrated solution of HBr

in iso-PrOH to give 0.6 g. V.HBr, m. 152-5° (EtOH-Et<sub>2</sub>O). Similarly prepared V were (R<sub>1</sub>, R<sub>2</sub>, and m.p. given): 4-NO<sub>2</sub>, Me, 148-9°; 4-NH<sub>2</sub>, Me, 165-6°. Similarly prepared were VI (R<sub>3</sub> = Et), m. 155-6°, and VI (R<sub>3</sub> = Me), m. 184-6°.

IT **16283-05-9P 16283-07-1P 187149-87-7DP,**  
 Pyrimidine, 1,4,5,6-tetrahydro-1-phenyl-, derivs.  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 16283-05-9 CAPLUS

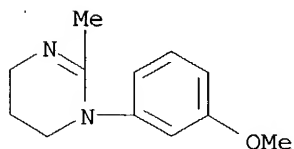
CN Pyrimidine, 2-ethyl-1,4,5,6-tetrahydro-1-(m-methoxyphenyl)-, monohydrobromide (8CI) (CA INDEX NAME)



● HBr

RN 16283-07-1 CAPLUS

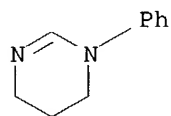
CN Pyrimidine, 1,4,5,6-tetrahydro-1-(m-methoxyphenyl)-2-methyl-,  
monohydrobromide (8CI) (CA INDEX NAME)



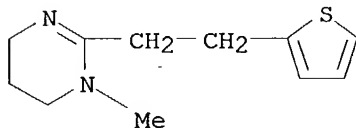
● HBr

RN 187149-87-7 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-phenyl- (9CI) (CA INDEX NAME)

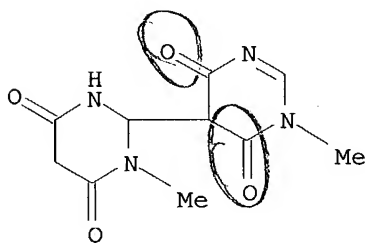


L18 ANSWER 123 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1967:54143 CAPLUS  
 DN 66:54143  
 TI Pyrantel tartrate, a new anthelmintic effective against infections of domestic animals  
 AU Austin, William C.; et al.  
 CS Chem. Res. Dep., Pfizer, Ltd., Sandwich, UK  
 SO Nature (London, United Kingdom) (1966), 212(5067), 1273-4  
 CODEN: NATUAS; ISSN: 0028-0836  
 DT Journal  
 LA English  
 AB Six compds. of the general structure I were prepared, where R = H, R1 = H, X = CH<sub>2</sub>CH<sub>2</sub>, n = 2; R = H, R1 = H, X = CH<sub>2</sub>CH<sub>2</sub>, n = 3; R = H, R1 = Me, X = CH<sub>2</sub>CH<sub>2</sub>, n = 2; R = H, R1 = Me, X = CH<sub>2</sub>CH<sub>2</sub>, n = 3; R = H, R1 = Me, X = CH:CH, n = 3; and R = Me, R1 = Me, X = CH:CH, n = 3. All compds. had broad spectrum activity against both adult and immature worm infections of domestic animals. The activity of these compds. against Nematospiroides dubius in mice and Nippostrongylus muris in rats increased in the order in which the compds. are listed. 1,4,5,6-Tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]pyrimidine, administered in a single oral dose of 25 mg./kg., had a high level of activity against adult and immature Haemonchus, Ostertagia, and Trichostrongylus in the abomasum, and Nematodirus, Cooperia, and Trichostrongylus in the small intestine of both sheep and cattle, and had a therapeutic index of 7 in sheep. This compound also was active against A. scaris suum in pigs, and against Toxocara and Toxascaris in dogs, and virtually eliminated Anclyostoma caninum and Uncinaria stenocephala from dogs.  
 IT **5685-90-5**  
 RL: BIOL (Biological study)  
 (as anthelmintic)  
 RN 5685-90-5 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]- (8CI, 9CI)  
 (CA INDEX NAME)



*Same*

L18 ANSWER 124 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1967:46392 CAPLUS  
 DN 66:46392  
 TI Dimers of N-methyl derivatives of 4,6-dihydroxy-pyrimidine  
 AU Kheifets, G. M.; Khromov-Borisov, N. V.; Kol'tsov, A. I.  
 CS 1st I. P. Pavlov Med. Inst., Leningrad, USSR  
 SO Zhurnal Organicheskoi Khimii (1966), 2(8), 1516-23  
 CODEN: ZORKAE; ISSN: 0514-7492  
 DT Journal  
 LA Russian  
 AB cf. preceding abstract Mono- and di-N-methylated 4,6-dihydroxypyrimidines dimerize readily by forming a labile bond between 5- and 2-positions. This reaction is the result of bipolarly ionic structure of the monomers, and the dimer structure was confirmed by uv and N.M.R. spectra (shown). Keeping 1-methyl-4-hydroxypyrimidin-6-one (I) in H<sub>2</sub>O several days gave 75-85% 1,6-dihydro-4-hydroxy-1-methyl-5-(1,2,3,6-tetrahydro-1-methyl-4-hydroxy-6-oxopyrimidin-2-yl)-6-oxopyrimidine (II), decomposed 203-4°; the same formed from I labeled with D in the 5-position. I and aqueous AgNO<sub>3</sub> gave 71% precipitated Ag salts, also formed from II in a similar reaction after brief heating. 4,6-Dimethoxypyrimidine heated 15 hrs. with MeI gave 1-methyl-4-methoxypyrimidin-6-one and 1,3-dimethyl-4-methoxy-6-oxopyrimidinium iodide (III). Heating mesomeric betaine IV with MeI 12 hrs. at 80° or 3 hrs. at 100° gave 1,6-dihydro-6-hydroxy-1,3-dimethyl-5-(1,2,3,6-tetrahydro-1,3-dimethyl-4-oxido-6-oxopyrimidin-2-yl)-6-oxo-3-pyrimidine (V), decomposed 268-9°. The same formed with MeI in EtOH either from IV or from III. IV refluxed in EtOH 3 hrs. gave N-formyl-N,N'-dimethylmalondiamide, m. 118-19°, which heated with NaHCO<sub>3</sub> 10 min., gave N,N'-dimethylmalondiamide. V in AcOH-HBr several days gave IV, but no reaction took place in H<sub>2</sub>O at pH 9-10, unlike IV which is attacked. Schemes were suggested for dimerizations.  
 IT **15250-33-6**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (as structure for 6-hydroxy-3-methyl-4(3H)-pyrimidinone dimer)  
 RN 15250-33-6 CAPLUS  
 CN [2,5'-Bipyrimidine]-4,4',6,6' (1H,1'H,5H,5'H)-tetrone, 2,3-dihydro-1,1'-dimethyl- (8CI) (CA INDEX NAME)



L18 ANSWER 125 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1966:508032 CAPLUS

DN 65:108032

OREF 65:20121f-h

TI Hydropyrimidines. V. Isomeric 2- and 4-oxodihydropyrimidines

AU Skaric, V.; Gaspert, B.; Jerkunica, I.

CS Inst. Ruder Boskovic, Zagreb, Yugoslavia

SO Croatica Chemica Acta (1966), 38, 1-8

CODEN: CCACAA; ISSN: 0011-1643

DT Journal

LA English

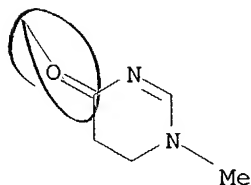
AB cf. CA 64, 5086e. Desulfuration of the thio analogs of 5,6-dihydrouracil and partial hydrogenation of oxopyrimidines were investigated as synthetic routes for the preparation of isomeric dihydropyrimidines. Hydrogenation of I afforded the corresponding tetrahydro derivative II and a compound showing absorption at 305 m $\mu$ . Desulfuration of 1-methyl-5,6-dihydro-2-thiouracil to unstable 1-methyl-5,6-dihydro-4-oxopyrimidine (III) is described. Desulfuration of 5,6-dihydro-2-thiouracil and its 3-methyl derivative afforded corresponding 5,6-dihydro-4-oxopyrimidines and having the double bond at 1,2 position. Raney nickel desulfuration of 5,6-dihydro-4-thiouracil (IV) and its 1-methyl derivative yielded corresponding 3,6-dihydro-2-hydroxypyrimidines. 3-Methyl derivative of IV afforded 3-methyl-1,6-dihydro-2-oxopyrimidine (V). Phys. properties given include (% yield and m.p. or b.p. given): II, 71, 63°, -; III 26, 135°/4 + 10-2 mm. V, 77, 102°. The N.M.R. and ir absorption spectra are recorded.

IT 10167-03-0, 4(1H)-Pyrimidinone, 5,6-dihydro-1-methyl-

10167-05-2, 4(3H)-Pyrimidinone, 5,6-dihydro-3-methyl-  
(preparation of)

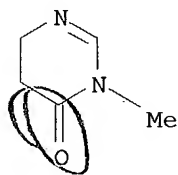
RN 10167-03-0 CAPLUS

CN 4(1H)-Pyrimidinone, 5,6-dihydro-1-methyl- (7CI, 8CI) (CA INDEX NAME)



RN 10167-05-2 CAPLUS

CN 4(3H)-Pyrimidinone, 5,6-dihydro-3-methyl- (7CI, 8CI) (CA INDEX NAME)





L18 ANSWER 126 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1966:70915 CAPLUS

DN 64:70915

OREF 64:13313h,13314a-c

TI Effects of rate of formation of 2,6-dichlorobenzonitrile on its toxicity to plants

AU Milborrow, B. V.

CS Shell Res. Ltd. Woodstock Agr. Res. Center, Sittingbourne, UK

SO Weed Research (1965), 5(4), 332-42

CODEN: WEREAT; ISSN: 0043-1737

DT Journal

LA English

AB The toxicity of the following 2,6-dichlorophenyl compds. (preparation not given) to 7 plant species are given: 2,6-dichlorothiobenzamide, m.

151°; O-ethoxycarbonyl-2,6-dichlorobenzaldoxime, m. 36°;

S-2-bromoethyl 2,6-dichlorophenylthiobenzimidate, m. 225°

(decomposition); 2-(2,6-dichlorophenyl)-5,6-dihydro-4H-1,3-thiazine hydrobromide, m. 197°; 5-ethyl-2-(2,6-dichlorophenyl)-2-thiazolin-

4-one, m. 232°; 5-methyl-2-(2,6-dichlorophenyl)-2-thiazolin-4-one,

m. 273°; 2,6-dichlorobenzamidine O-sulfonic acid (K salt), m.

160° (decomposition); 2, 6-dichlorobenzamidine HCl salt, m. 338 °

(decomposition); O-butyl-2,6-dichlorobenzaldoxime ( $\beta$ -form), m. 69°;

2-(2,6-dichlorophenyl)-2-thiazoline, m. 73°; S,S'-(1,4-but-2-

enylene)-bis(2,6-dichlorothiobenzimidate) dihydrobromide, m. 202°;

2,6-dichlorobenzamidine, m. 129°; 2-(2,6-dichlorophenyl)-2-

thiazolin-4-one, m. 212°; 2-(2,6-dichlorophenyl)-5,6-dihydro-4H-1,3-

thiazine hydrochloride, m. 231°; N-phenyl-2,6-dichlorobenzamidine,

-, HCl salt m. 210°; 2,6-dichlorothiobenzamidoxime, m. 227°;

3-(2,6-dichlorophenyl)-4,5,6,7-tetrahydro-1,2,4-oxadiazepine, m.

229°; N-ethoxycarbonyl-2,6-dichlorobenzamide, m. 185°;

4-methyl-2-(2,6-dichlorophenyl)thiazole hydrochloride, m. 175°;

O-butyl-2,6-dichlorobenzaldoxime ( $\alpha$ -form), m. -16°;

2-(2,6-dichlorophenyl)-4-ethyl-2-thiazoline, liquid; 2-(2,6-dichlorophenyl)-

4,5,6,7-tetrahydrobenzothiazole hydrochloride, m. 190° (decomposition);

2-(2,6-dichlorophenyl)-4-methyl-2-thiazoline hydrochloride, -;

N-(2,6-dichlorobenzylidene)phenylethylamine N-oxide, m. 137°;

N-phenyl-2,6-dichlorobenzamide, m. 178°; N-(2,6-

dichlorothiobenzoyl)morpholine, m. 110°; 1-phenyl-2-(2,6-

dichlorophenyl)-1,4,5,6-tetrahydropyrimidine hydrobromide, m. 256°;

$\alpha,\alpha$ -bis(ethoxycarbonylamino)-2,6-dichlorotoluene, m.

109°; 2-(2,6-dichlorophenyl)-4,5,6,7-tetra-hydrobenzothiazole, m.

95°. These compds. were all converted to 2,6-dichlorobenzonitrile

in fresh field soil. Any differences in the behavior of the compds. was

due to variations in the site or rate of release of 2,6-

dichlorobenzonitrile. The compds. which are rapidly broken down showed a

greater range of toxicity values than those that break down slowly; this

change in selectivity was related to the relative fresh weight growth rates

of the different species.

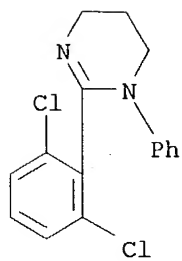
IT 3797-96-4, Pyrimidine, 2-(2,6-dichlorophenyl)-1,4,5,6-tetrahydro-1-phenyl-, hydrobromide

(herbicidal activity of, 2,6-dichlorobenzonitrile formation and)

RN 3797-96-4 CAPLUS

CN Pyrimidine, 2-(2,6-dichlorophenyl)-1,4,5,6-tetrahydro-1-phenyl-, monohydrobromide (9CI) (CA INDEX NAME)

*Same  
as #140*



● HBr

L18 ANSWER 127 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1966:43855 CAPLUS  
 DN 64:43855  
 OREF 64:8192c-h,8193a-c  
 TI Anthelmintic 2-alkylthiophenes  
 PA Pfizer Corp.  
 SO 47 pp.  
 DT Patent  
 LA Unavailable  
 FAN.CNT 1

*Same*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 658987		19650728	BE	
	GB 1045838			GB	
PRAI	GB		19640128		

AB A mixture of 123.5 g. 2-thiophenecarboxaldehyde, 85.0 g. NCCH<sub>2</sub>CO<sub>2</sub>H, 110 ml. C<sub>5</sub>H<sub>5</sub>N, 3 g. NH<sub>4</sub>OAc, and 200 ml. PhMe was refluxed under a Dean and Stark head for 48 hrs., the mixture becoming very dark. Distillation gave 107.4 g. 3-(2-thienyl)acrylonitrile (I), b<sub>30</sub> 154°, n<sub>25D</sub> 1.6373. Catalytic hydrogenation 67.6 g. I in 300 ml. MeOH containing 50 ml. N NaOH using 10 g. 10% Pd-C gave 49.5 g. 3-(2-thienyl)propionitrile (II), b<sub>35</sub> 156-8°, n<sub>25D</sub> 1.5372. Heating a mixture of 13.7 g. II, 6.5 g. H<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>NH<sub>2</sub> (III), and 19.0 g. p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H.H<sub>2</sub>O at 175° for 8 hrs. and cooling gave 19.5 g. IV (n = 2, m = 1) (V) p-toluenesulfonate, m. 104-6° (iso-PrOH), converted into the free base, m. 99-101° (Me<sub>2</sub>CO-C<sub>6</sub>H<sub>14</sub>). A mixture of 8.5 g. Me, β-(2-thienyl)propionimide-HCl (VI), 2.7 g. III, and 40 ml. dry MeOH was refluxed for 90 min. to give V HCl salt, m. 142.5-3.5° (iso-PrOH-Et<sub>2</sub>O). Similarly were prepared IV (n = 2, m = 3) (VIa).HCl, m. 166.5-7.5° from VI and H<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub>, and IV (n = 3, m = 3) (VII), m. 138-9° from Meγ-(2-thienyl)butyrimide-HCl. V pamoate and VII citrate were prepared by mixing the components in EtOH and H<sub>2</sub>O, resp., and evaporating the solns. so formed. A mixture of 23.4

g.

2-thienylacrylamide and 18.7 g. 1,3-propane sultone was heated with vigorous stirring at 130-40° for 30 min. when the melt had solidified. Heating for a further 30 min., trituration with Me<sub>2</sub>CO, and filtering gave 38.9 g. 3-[1-imino(3-thienyl)oxy]propane)sulfonic acid, 3.2 g. of which when heated with 1.5 g. MeNH(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> (VIIa) in 50 ml. EtOH for 90 min. under reflux, and treating with NaOH gave 1.3 g. VIII (R = Me, m = 2), m. 178-9° (MeOH). The following VIII were similarly prepared (R, m, salt, and m.p. given): H, 2, maleate, 153-5°; Me, 1, p-toluenesulfonate, 162-4°; H, 1, maleate, 162-3°. The following IX were prepared using the methods described (R, n, m, salt, and m.p. or b.p. given): Me, 2, 1, base (X), 134-6°/0.5 mm., (n<sub>24D</sub> 1.5570); Me, 2, 2, base (XI), 122-3°/0.4 mm., (n<sub>24D</sub> 1.5648); Me, 2, 1, p-toluenesulfonate, 104-5.5° (iso-PrOH-Et<sub>2</sub>O); Me, 2, 1, citrate, 141-2° (MeOH-Et<sub>2</sub>O); Me, 2, 1, phosphate, 191-2.5°; Me, 2, 1, sulfate, 74.5-5° (iso-PrOH); Me, 2, 2, p-toluenesulfonate (XII), 122-3° (iso-PrOH-Et<sub>2</sub>O); Me, 2, 2, sulfate, 97-9° (iso-PrOH); Me, 2, 2, nitrate, 108.5-110° (iso-PrOH-Et<sub>2</sub>O); Me, 2, 2, 5-sulfosalicylate, 154-5° (iso-PrOH); Me, 2, 2, citrate, 142-3.5°; Me, 2, 2, phosphate, 202.5-5° Me, 2, 2, HCl, 113-18° (hygroscopic). Other salts of IX (R = Me, n = m = 2) prepared were (salt and m.p. given): pamoate, 137-43°; maleate, 78-80°; stearate, 48-53°; laurate, oil; tartrate, 140-2°; malate, 99-100°; fumarate, 149-51°; succinate, 85-90°; acetate, oil; oxalate, 76-8°. Other salts of IX (R = Me, n = 2, m = 1) (salt and m.p. given): HCl,

70-90°; sulfosalicylate, 153-9°; pamoate, 166-8°; stearate, 48-53°; laurate, oil; tartrate, 167-91°; fumarate, 157-8°; succinate, 107-8°; acetate, oil. To a Grignard solution prepared by refluxing together for 2 hrs. 4.8 g. Mg, 28.7 g. 2-(2-chloroethyl)thiophene, and 200 ml. Et<sub>2</sub>O was slowly added a solution of 23 g. Cl(CH<sub>2</sub>)<sub>4</sub>CN in 150 ml. dry Et<sub>2</sub>O. After refluxing 30 min., 150 ml. xylene was added, the ether removed, and the mixture refluxed for 1 hr., cooled, and treated with 150 ml. 10% NH<sub>4</sub>Cl to give XIII (R = H, n = 2), b<sub>0.002</sub> 68-9°; p-toluenesulfonate m. 101-3° (iso-PrOH-Et<sub>2</sub>O); maleate m. 78-80°. By a similar procedure were prepared XIII (R = H, n = 1), b<sub>0.4</sub> 89° (p-toluenesulfonate m. 100-1.5°), and XIII (R = Me, n = 1), b<sub>0.5</sub> 97.9° (p-toluenesulfonate m. 105-6.5°). The amsonate of XI, m. >300°, was prepared by treatment of a solution of 1.85 g. amsonic acid in H<sub>2</sub>O containing 2 equivs. NaOH with 3.8 g. XII in H<sub>2</sub>O. The suramin salt of VIa, m. 145-50°, was obtained as an amorphous solid from the components. VIa amsonate m. >300°. A mixture of 250 g. II and 160.5 g. VIIa was treated with H<sub>2</sub>S until 6.1 g. had been absorbed and the temperature was raised to 70-80° for 2 hrs. and to 95° for 6 hrs. Distillation gave 84.7% X. A similar yield was obtained using P<sub>2</sub>S<sub>5</sub> in place of the H<sub>2</sub>S. 2-(2-Chloroethoxy)tetrahydropyran (XIV), b<sub>14</sub> 87-90° was prepared in 85.2% yield by reacting 241.5 g. Cl(CH<sub>2</sub>)<sub>2</sub>OH, 252 g. dihydropyran, and 10 drops concentrated HCl. To 1.5 l. anhydrous liquid NH<sub>3</sub> containing 0.6 g. Zn(NO<sub>3</sub>)<sub>2</sub> was added 32.9 g. Na followed dropwise by 78.7 g. EtCN followed by 266 g. XIV. Evaporation, extraction with

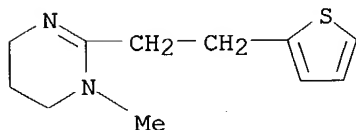
C<sub>6</sub>H<sub>6</sub>,

and distillation gave 22.8% 2-(3-cyanobutoxy)tetrahydrofuran (XV), b<sub>15</sub> 95-102°. Refluxing 59.8 g. XV in 150 ml. MeOH with 15 ml. concentrated HCl for 5 min. gave 25 g. NCCHMeCH<sub>2</sub>CH<sub>2</sub>OH, b<sub>16</sub> 116-18°, which with 33 g. SOCl<sub>2</sub> in 100 ml. C<sub>6</sub>H<sub>6</sub> in the cold gave 15.6 g. NCCHMeCH<sub>2</sub>CH<sub>2</sub>Cl, b<sub>15</sub> 80-1°. The compds. are active against helminths of the families Ancylostomatidae, Strongylidae, and Trichostrongylidae in sheep, cattle, goats, dogs, cats, and horses by the oral or parenteral routes and details are given. Laboratory expts. using mice and rats infected with *Nematospiroides dubius*, *Nippostrongylus muris*, and *Syphacia obvelata* are given in detail demonstrating therapeutic activity. Animals usually require only one dose, preferably parenterally, at a level of 20-150 mg. of the active base/kg. Oral doses are in the range 5-150 mg./kg. These compds. may also be used prophylactically at a dosage of 5-50 mg./kg.

IT **5685-90-5**, Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]- **5722-14-5**, Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-, p-toluenesulfonate (preparation of)

RN 5685-90-5 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]- (8CI, 9CI) (CA INDEX NAME)



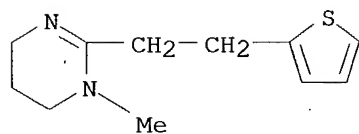
RN 5722-14-5 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-, mono(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)

CM 1

CRN 5685-90-5

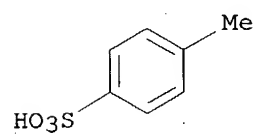
CMF C11 H16 N2 S



CM 2

CRN 104-15-4

CMF C7 H8 O3 S



L18 ANSWER 128 OF 159 CAPLUS . COPYRIGHT 2004 ACS on STN  
 AN 1966:20070 CAPLUS  
 DN 64:20070  
 OREF 64:3747d-h,3748a-c  
 TI Merocyanine and planar undissociated cyanine dyes  
 IN Heseltine, Donald W.; Brooker, Leslie G. S.  
 PA Eastman Kodak Co.  
 SO 8 pp.; Continuation-in-part of U.S. 2,927,026 (CA 54, 19241c)  
 DT Patent  
 LA Unavailable  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3213089		19651019	US	19600205

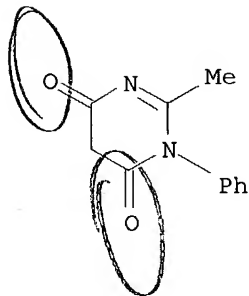
AB Compds. of the general formulas I and II, where Q = O, S, CH:CH, or CMe<sub>2</sub>, R = Me or Et, m and n = 0 or 1, and X = S or CONPh, are photographic sensitizing dyes. They are prepared by condensing 2-methylthiazol in-4-one or 2-methyl-1-phenyl-4,6(1H, 5H)pyrimidinedione (IIa) with one or two moles of III (Y = SEt, p = 0) (IV) or III [Y = N(Ac)Ph, p = 1] (V). Analogous dyes are also prepared from VI or VII with IV or V. Thus, a solution of 7.5 g. MeCSNH<sub>2</sub> and 9.4 g. ClCH<sub>2</sub>CONH<sub>2</sub> in 25 ml. EtOH is heated to reflux, allowed to stand for 1 hr. at room temperature, filtered to remove NH<sub>4</sub>Cl, treated with 3.35 g. 3-ethyl-2-ethylmercaptobenzothiazolium ethylsulfate (VIII) and 1.4 ml. Et<sub>3</sub>N, heated to dissolve, let stand overnight, and poured into 200 ml. H<sub>2</sub>O to give a 20% yield of I (Q = X = S, R = Et, m = 0) (IX), m. 224-5° (decomposition) (C<sub>6</sub>H<sub>6</sub>). Similarly, other I are prepared (Q, R, m, X, % yield, m.p., and sensitizing range and maximum in mμ for AgBr-AgI emulsion given): O, Et, 1, S (X), 10, 231-1° (decomposition) (MeOH or C<sub>6</sub>H<sub>6</sub>), 550, 525; S, Et, 1, S, 9, 228-9° (decomposition) (MeOH or C<sub>6</sub>H<sub>6</sub>), 580, 555. A solution of 2.46 g. VIII, 1.05 g. IX and 1.1 ml. Et<sub>3</sub>N in pyridine is heated under reflux for 10 min. and precipitated with 100 ml. H<sub>2</sub>O to give a 22% yield of II (Q = X = S, R = Et, m = n = 0), m. >320°, sensitizing range to 585 mμ, maximum at 535 mμ. Similarly, other II are prepared (Q, R, m, n, X, % yield, m.p., sensitizing range, and maximum in mμ given): CMe<sub>2</sub>, Me, 1, 1, CONPh, 25, 275-7° (decomposition), 580-660, --; CH:CH, Et, 1, 1, CONPh (HI salt), 80, 244-6° (decomposition), 600-80, 650; S, Et, 0, 1, S, 33, 224-5° (decomposition), 590-710, 550 and 665; S, Et, 1, 0, S, 28, 306-7° (pyridine-MeOH), 660, 620; S, Et, 1, 1, S, 46, 183-5° (decomposition at 250°) (pyridine-70% aqueous MeOH), 670-760, --. A solution of 1.49 g. VI, 4.50 g. V (Z = iodide) (XI) and 1.5 ml., Et<sub>3</sub>N in 15 ml. EtOH heated under reflux for 30 min. gave 6% I analog, m. 190-1° (decomposition) (EtOH); using 2 moles XI gave 12% II analog, m. 205-6° (decomposition). Similarly VII gave a 48% yield of I analog, m. >300° (MeOH). VII and 2 moles XI gave II analog, m. 222-4° (decomposition); VII and 2 moles VIII gave II analog, m. 218-20° (decomposition) (MeOH). A mixture of 0.45 g. 3-ethyl-5-[(3-ethyl-2-benzoxazolinylidene)ethylidene]rhodanine and 0.5 g. p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>Me was fused over a free flame, heated on a steam bath for 1 hr., treated with 0.45 g. X, 0.2 ml. Et<sub>3</sub>N, and 10 ml. pyridine, refluxed for 10 min., and poured into 100 ml. H<sub>2</sub>O. The aqueous liquor was decanted and the residue boiled with 100 ml. MeOH, cooled, and filtered to give 0.27 g. (30%) XII, m. 305-7° (decomposition) (pyridine-MeOH), sensitizing to 720 mμ, maximum at 525 and 685 mμ. VI, m. 148-50° (90-120° ligroine) was prepared in 40% yield by heating a mixture at 21 g. 5-aminotetrazole, 25 g. Ac<sub>2</sub>CH<sub>2</sub> and 5 ml. piperidine in 150 ml. EtOH for 16 hrs. and evaporating to dryness. IIa, m. 173-6°, was prepared in 38% yield by adding a solution of 39.5 g.

MeC(:NPh)NH<sub>2</sub>.HCl in 125 ml. EtOH to a chilled solution of 13.8 g. Na in 200 ml. EtOH, filtering the NaCl after 10 min., adding 32 g. CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub>, refluxing for 6 days, dissolving the product in H<sub>2</sub>O, precipitating with AcOH (crude yield 64%) and purifying by dissolving in EtOH-Et<sub>3</sub>N and pptg with HOAc. VII, m. 263-3° (MeOH), was prepared in 29% yield by heating a mixture of 54 g. 2-amino-4-picoline and 160 g. CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> under gentle reflux until the theoretical amount of EtOH was collected, chilling, and filtering.

IT **7348-62-1**, 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl-  
(preparation of)

RN 7348-62-1 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA  
INDEX NAME)



L18 ANSWER 129 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1966:11487 CAPLUS

DN 64:11487

OREF 64:2085b-f

TI Reactions of  $\beta$ - and  $\gamma$ -oxocarboxylic esters with ethylenediamines

AU Baganz, Horst; Rabe, Siegfried

CS Tech. Univ., Berlin

SO Chemische Berichte (1965), 98(11), 3652-8

CODEN: CHBEAM; ISSN: 0009-2940

DT Journal

LA German

OS CASREACT 64:11487

AB  $\beta$ -Oxocarboxylic acid esters with  $(\text{CH}_2\text{NH}_2)_2$  (I) or N-monoalkyl derivs. of I yielded with the elimination of ester the corresponding II. Acetalized  $\beta$ -keto esters gave the same II. The course of this fragmentation reaction is discussed. The ethylene ketal (III) of  $\text{AcCH}_2\text{CH}_2\text{CO}_2\text{Et}$ , however, yielded similarly the acetalized 2-(3-oxobutyl)imidazolines which were converted by mild, acidic hydrolysis to the corresponding oxo compds.  $(\text{EtO})_2\text{CHCH}_2\text{CO}_2\text{Et}$  (19.0 g.) and 18.5 g.  $\text{MeNHCH}_2\text{CH}_2\text{NH}_2$  and 3 drops concentrated HCl heated during 6 hrs. to  $230^\circ$  gave 14 g. 1:1 mixture of 1-methyl-2-imidazoline (IV) and the 2-Me derivative

of

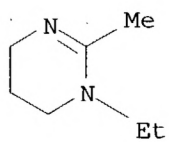
IV.  $\text{MeC}(\text{OEt})\text{:CHCO}_2\text{Et}$  (120 g.) and 300 cc. I refluxed 6 hrs. with stirring and distilled gave 69 g. II ( $\text{R} = \text{Me}$ ) (picrate m.  $201-2^\circ$ ), 17 g.  $(\text{CH}_2\text{NHAc})_2$ , m.  $173^\circ$ , 33.5 g.  $\text{EtOH}$ , and 10.5 g.  $\text{AcOEt}$ . Ethylene ketal (IV) of  $\text{AcCH}_2\text{CO}_2\text{Et}$  (35 g.) and 46.5 g.  $\text{BuNHCH}_2\text{CH}_2\text{NH}_2$  (V) heated 7 hrs. at  $210^\circ$  with 3 drops concentrated HCl gave 41.6 g. 2-methyl-1-butyl-2-imidazoline (VI), b12  $96^\circ$ , n25D 1.4680 [picrate m.  $118^\circ$  ( $\text{EtOH}$ )], and  $(\text{CH}_2\text{OH})_2\text{Na}$  (4.6 g.), 160 cc.  $\text{EtOH}$ , 23.2 g. V, and 35 g. IV heated 3 hrs. at  $200^\circ$  yielded 25.4 g.  $\text{BuNHCH}_2\text{CH}_2\text{NHAc}$ , b0.1  $125-8^\circ$ , n20D 1.4620. V (23.2 g.), 26 g.  $\text{AcCH}_2\text{Et}$ , and about 20 mg.  $\text{pMeC}_6\text{H}_4\text{SO}_3\text{H}$  heated 5 hrs. at  $210^\circ$  gave 21.8 g. VI, b12  $96^\circ$  n25D 1.4680. V (23.2 g.) and 32.1 g.  $\text{PrCOCH}_2\text{CO}_2\text{Et}$  gave similarly 31.1 g. 2-Pr analog of VI, b12  $113^\circ$ , n20D 1.4640; picrate m.  $81^\circ$  ( $\text{EtOH}$ ).  $\text{EtNH}(\text{CH}_2)_3\text{NH}_2$  (10.4 g.) and 26 g.  $\text{AcCH}_2\text{CO}_2\text{Et}$  yielded similarly 20.1 g. 1-ethyl-2-methyl-2-tetrahydropyrimidine, b12  $84^\circ$ , n25D 1.4859.  $\text{PhCH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$  (30 g.) and 26 g.  $\text{AcCH}_2\text{CO}_2\text{Et}$  yielded 25.9 g. 1-benzyl-2-methyl-2-imidazoline, b0.1  $97^\circ$ , n25D 1.5550.  $\text{AcMe}_2\text{CCO}_2\text{Et}$  (VII) (31.6 g.), 24.8 g.  $(\text{CH}_2\text{OH})_2$ , 100 cc.  $\text{C}_6\text{H}_6$ , and 80 mg.  $\text{p-MeC}_6\text{H}_4\text{SO}_3\text{H}$  refluxed 30 hrs. with the azeotropic removal of  $\text{H}_2\text{O}$  gave 25.6 g. ethylene ketal (VIII) of VII, b12  $103^\circ$ , n25D 1.4367; 2,4-dinitrophenylhydrazones m.  $108.5^\circ$  ( $\text{EtOH}$ ). III (94 g.) and 240 g. I refluxed 12 hrs. with stirring yielded 42.2 g. IX ( $\text{R} = \text{H}$ ), b0.2  $175-85^\circ$ , m.  $61-3^\circ$  (ligroine, b.  $60-80^\circ$ ); picrate m.  $106-7^\circ$  ( $\text{EtOH}$ ); 2,4-dinitrophenylhydrazones HCl salt m.  $217^\circ$  (aqueous  $\text{MeOH}$ ), 87.5%. V (35 g.) and 56.5 g. III heated gradually to  $210^\circ$  yielded 40.8 g. IX ( $\text{R} = \text{Bu}$ ) (X), b0.1  $144-6^\circ$ , n25D 1.4805; picrate m.  $105^\circ$  ( $\text{EtOH}$ ). X (24 g.), 100 cc.  $\text{EtOH}$ , and 50 cc. 2N HCl heated 45 min. on a water bath yielded 17.1 g. II ( $\text{R} = \text{AcCH}_2\text{CH}_2$ ), b0.1  $86-7^\circ$ , n25D 1.4785; picrate m.  $88^\circ$  ( $\text{EtOH}$ ); 2,4-dinitrophenylhydrazones HCl salt m.  $108^\circ$  (aqueous  $\text{EtOH}$ ).

IT **4271-97-0**, Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-methyl- (preparation of)

RN 4271-97-0 CAPLUS

CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)





L18 ANSWER 130 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1965:497695 CAPLUS

DN 63:97695

OREF 63:17891b-e

TI Hydrogenation of amino nitriles. VIII. Catalytic hydrogenation of N-alkyl-N-(2-cyanoethyl)acetamides

AU Mikolajewska, Halina; Kotelko, Antoni

CS Akad. Med., Lodz

SO Acta Polon. Pharm. (1965), 22(3), 219-24

DT Journal

LA Polish

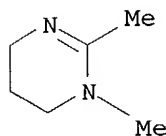
AB cf. CA 62, 7674c. Hydrogenation of AcNRCH<sub>2</sub>CH<sub>2</sub>CN (I) was studied. To prepare I, 0.5 mole RNHCH<sub>2</sub>CH<sub>2</sub>CN (II) in 50 ml. C<sub>6</sub>H<sub>6</sub> was treated under cooling with 0.55 mole Ac<sub>2</sub>O, the mixture refluxed 2 hrs., and distilled. Hydrogenation was effected at room temperature and 60 atmospheric initial H pressure in

the presence of Raney Ni W2 (60% by weight with respect to I); I was dissolved in approx. 10 vols. 12% alc. NH<sub>3</sub>. Hydrogenation products were fractionated in vacuo to yield tetrahydropyrimidine derivs. (III) and RNH(CH<sub>2</sub>)<sub>3</sub>NHAc (IV). The formation of IV involved migration of the Ac group. The tabulated compds. were reported. II were prepared by treating RNH<sub>2</sub> with 1 mole CH<sub>2</sub>:CHCN. compound, R, % yield, b.p./mm., m.p., n<sub>D</sub><sup>20</sup>, d<sub>20</sub>, picrate m.p.; I, H, 96, 142-4°/2, 65-6°, -, -, -; I, Me, 96, 162-4°/15, -, 1.4652, 1.0408, -, I, Et, 98, 158-60°/15, -, 1.4646, 1.0209, -, I, Pr, 98, 165-7°/15, -, 1.4637, 0.9950, -, I, iso-Pr, 96, 168-9°/15, 69-70°, -, -, -; I, Bu, 98, 176-8°/15, 1.4632, 0.9802, -, III, H, 67, 112-14°/15, 75°, 1.5020, -, 156-7°; III, Me, 54, 86-90°/15, -, 1.4918, 0.9822, 128-9°; III, Et, 48, 90-2°/15, -, 1.4900, 0.9618, 120-1°; III, Pr, 44, 105-7°/15, -, 1.4853, 0.9352, 134-5°; III, Bu, 37, 110-12°/15, -, 1.4842, 0.9347, 110-11°; IV, H, 42, 146-8°/15, -, 1.4750, 0.9879, -, IV, Et, 46, 154-6°/15, -, 1.4696, 0.9604, -, IV, Pr, 51, 158-60°/15, -, 1.4636, 0.9328, -, IV, iso-Pr, 64, 160-2°/15, -, 1.4665, 0.9472, 150-1°; IV, Bu, 57, 160-2°/15, -, 1.4688, 0.9364, -; The II/RN(CH<sub>2</sub>CH<sub>2</sub>CN)<sub>2</sub> ratio in the products increased with chain length and was 5:1 with R = Me, 8:1 with R = Et, and 10:1 with R = Pr; only II was formed with R = Bu.

IT 4271-96-9, Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl-  
4271-97-0, Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-methyl-  
4271-98-1, Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1-propyl-  
4335-66-4, Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-methyl-  
(preparation of)

RN 4271-96-9 CAPLUS

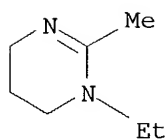
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



*Garz*

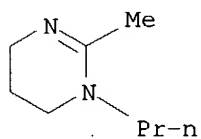
RN 4271-97-0 CAPLUS

CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



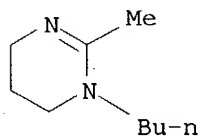
RN 4271-98-1 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1-propyl- (7CI, 8CI) (CA INDEX NAME)



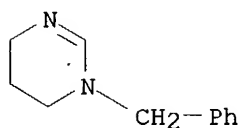
RN 4335-66-4 CAPLUS

CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



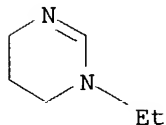
L18 ANSWER 131 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1965:403349 CAPLUS  
 DN 63:3349  
 OREF 63:610g-h,611a  
 TI Cyclic formamidines  
 IN Seefelder, Matthias; Jentzsch, Wolfgang  
 PA Badische Anilin- & Soda-Fabrik A.-G.  
 SO 3 pp.  
 DT Patent  
 LA Unavailable  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1189998		19650401	DE	19611114
AB	Title compds. which are intermediates for the preparation of pharmaceuticals and insecticides were prepared by the reaction of unsym. substituted diamines and HCN at 20-180°. Thus, 140 HCN in 160 parts ether was added dropwise with stirring to 320 ethylenediamine at room temperature, the mixture warmed up and kept at 70° (ether distilled) until all NH <sub>3</sub> had evolved, kept 30 min. at 100°, and distilled to give 158 parts by weight 2-imidazoline (I), b <sub>14</sub> 96-8°. Similarly prepared were these substituted I (substituent, b.p., pressure in mm., and % yield given): 4-methyl, 50-1°, 0.4, 66; 4,5-tetramethylene, 90-2°, 0.4, 47.5; N-phenyl, 94-5°, 0.2, 58; 1-(β-aminoethyl), 72-80°, 0.3, 76; 1-(p-methoxybenzyl), 140-65°, 0.5-0.9, 72, [m. 68-9° (petr. ether)]. Also prepared were 1,4,5,6-tetrahydropyrimidine (II), b <sub>18</sub> 124-5°, in 86.8% yield and these substituted II (substituent, b.p., pressure in mm., m.p., and % yield given): N-ethyl, 90-2°, 20, -, 73.6; 1-benzyl, -, -, 69.5-70.5° (petr. ether), 66; 4,4,6-trimethyl, 75-85°, 1-2.5, -, -; also 4,5,6,7-tetrahydro-1H-diazepine, b <sub>0.4</sub> -0.6 112-25°.				
IT	<b>1602-94-4</b> , Pyrimidine, 1-benzyl-1,4,5,6-tetrahydro- <b>1615-04-9</b> , Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro- (preparation of)				
RN	1602-94-4 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)				



*Same*

RN 1615-04-9 CAPLUS  
 CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro- (7CI, 8CI) (CA INDEX NAME)



L18 ANSWER 132 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1965:90914 CAPLUS

DN 62:90914

OREF 62:16240a-f

TI N,N'-Disubstituted formamidines

AU Jentzsch, Wolfgang; Seefelder, Matthias

CS Badische Anilin- Soda-Fabrik A.-G., Ludwigshafen, Germany

SO Chemische Berichte (1965), 98(4), 1342-9

CODEN: CHBEAM; ISSN: 0009-2940

DT Journal

LA German

OS CASREACT 62:90914

AB HCN reacts under mild conditions with aliphatic diamines to give 2-imidazolines and  $\Delta^2$ -tetrahydropyrimidines (cyclic formamidines) and with primary aliphatic amines to give the corresponding N,N'-dialkylformamidine. (CH<sub>2</sub>NH<sub>2</sub>)<sub>2</sub> (I) (320 g.) treated at room temperature dropwise with stirring with 140 g. HCN in 160 cc. Et<sub>2</sub>O and heated 0.5 hr. at 100° yielded 158 g. 2-imidazoline (II), b<sub>14</sub> 96-8°. I (610 g.) treated at 100° with 218 g. HCN in N during 3 hrs. and kept 2 hrs. at 100° yielded 145 g. unreacted I and 278 g. II. I (240 g.) refluxed during 2 hrs. with 54 g. HCN under N gave 102 g. unreacted I and 119 g. II, b<sub>0.3</sub> 70-6°; picrate, m. 164-5° (EtOH), which recrystd. twice from H<sub>2</sub>O gave the picrate of I, m. 208-10°. MeCH-(NH<sub>2</sub>)CH<sub>2</sub>NH<sub>2</sub> (52 g.) in 200 g. Et<sub>2</sub>O treated with stirring at about 10° dropwise with 19 g. HCN in 80 cc. Et<sub>2</sub>O and heated slowly to 50-60° gave 15 g. 4-Me derivative of II, b<sub>0.4</sub> 50-1°. Me<sub>2</sub>C(NH<sub>2</sub>)CH<sub>2</sub>NH<sub>2</sub> gave similarly the 4,4-dimethyl derivative of II, m. 66-8°. H<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>NHPh (95 g.) and 19 g. liquid HCN heated 40 hrs. at 65° in an autoclave gave 60 g. 1-Ph derivative of II, b<sub>0.2</sub> 94-5°. Diethylenetriamine (103 g.) in 200 cc. Et<sub>2</sub>O with 27 g. HCN in 150 cc. Et<sub>2</sub>O yielded 86 g. 1-(H<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>) derivative of II, b<sub>0.3</sub> 72-80°; dipicrate m. 211° (decomposition) (MeOCH<sub>2</sub>CH<sub>2</sub>OH). p-MeOC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> (100 g.) and 15 g. HCN heated 6 hrs. at 130° yielded 19 g. 1-(p-MeOC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>) derivative of II, b<sub>0.5-0.9</sub> 140-65°, m. 68-9° (petr. ether); picrate m. 115-16° (C<sub>6</sub>H<sub>6</sub>-AcOEt). HOCH<sub>2</sub>CH<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> (109 g.) in 250 cc. dry C<sub>6</sub>H<sub>6</sub> treated dropwise at 5-10° with 27 g. HCN in 100 cc. C<sub>6</sub>H<sub>6</sub>, stirred overnight at room temperature, and refluxed 5 hrs. gave 77 g. 1-(HOCH<sub>2</sub>CH<sub>2</sub>) derivative of

II,

b<sub>0.1</sub> 100° m. 58-9° (AcOEt); picrate m. 94-5° (AcOEt). H<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> (III) (330 g.) treated dropwise at 20-5° with 108 g. HCN in 160 cc. Et<sub>2</sub>O yielded 282 g. 1,4,5,6-tetrahydropyrimidine (IV), b<sub>18</sub> 124-5°, n<sub>23D</sub> 1.5725. III (880 g.) treated at 70-5° with 216 g. HCN under N and heated 2 hrs. at 120° gave 220 g. unreacted III and 588 g. IV, b<sub>15</sub> 118-19°; picrate m. 110-11° (EtOH). EtNH(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> (51 g.) in 150 cc. Et<sub>2</sub>O treated dropwise at 5-10° with stirring with 13.5 g. HCN in 100 cc. Et<sub>2</sub>O gave 34 g. 1-Et derivative of IV, b<sub>20</sub> 90-2°; picrate m. 75-6° (C<sub>6</sub>H<sub>6</sub>). Similarly were prepared the 1-Me derivative of IV, b<sub>15</sub> 71.5-73°, the 4,4,6-trimethyl derivative of IV, 55%, b<sub>1-2.5</sub> 75-80°, and 1,3-diazacycloheptene, 60%, b<sub>0.4-0.6</sub> 112-25°. MeNH<sub>2</sub> (775 g.) treated dropwise at -30° with stirring with 240 g. liquid HCN and heated 20 hrs. in an autoclave at 80° gave 428 g. HC(:NMe)NHMe, b<sub>15</sub> 50-3°, b<sub>80</sub> 85-7°; picrate m. 167-8° (EtOH). Similarly were prepared the following RN:CHNHR. (R, % yield, b.p./mm., and m.p. picrate given): Et, 44, 62-3°/12, 119-21°; Pr, 60, 94-6°/20, 105-8°; Bu, 60, 115-25°/15-20, 112-14°; iso-Bu, 56, 102-4°/16, 162-4°; iso-PrCH<sub>2</sub>CH<sub>2</sub>, 46, 134-8°/21, --;

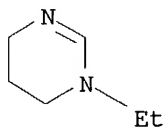
*Same*

PhCH<sub>2</sub>CH<sub>2</sub>, 40, 180-4°/0.6, --; cyclohexyl, 13.5, 148-52°/ 15, 226-8°.

IT **1615-04-9**, Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-  
**2304-03-2**, Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-  
(preparation of)

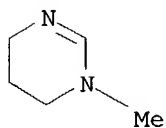
RN 1615-04-9 CAPLUS

CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro- (7CI, 8CI) (CA INDEX NAME)



RN 2304-03-2 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L18 ANSWER 133 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1964:491940 CAPLUS

DN 61:91940

OREF 61:15961a-d

TI Structure of 4,6-dihydroxypyrimidine and its 5-methyl analog

AU Kheifets, G. M.; Khromov-Borisov, N. V.

SO Zhurnal Obshchei Khimii (1964), 34(9), 3134-5

CODEN: ZOKHA4; ISSN: 0044-460X

DT Journal

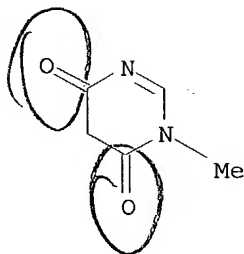
LA Russian

AB 4,6-Dihydroxypyrimidine (I) in aqueous solution exists mainly as 4-hydroxy-1H-pyrimidin-6-one in equilibrium with the diketone form (II). Ultraviolet spectral data are given for pyrimidines in neutral, cationic (7.4N HCl), and anionic forms: neutral, cation, anion; compound,  $\lambda$  (log  $\epsilon$ ),  $\lambda$  (log  $\epsilon$ ),  $\lambda$  (log  $\epsilon$ ); 4,6-dihydroxypyrimidine, 253 (3.98), 243 (3.83), 251 (3.91); 4-hydroxy-1-methylpyrimidin-6-, 253 (3.87), 243 (3.79), 251 (3.73); one; 4-methoxy-1H-pyrimidin-6-one, 236 (3.58), 241 (3.86), 229 (3.80); 254 (3.55); 4-methoxy-1-methylpyrimidin-6-, 259 (3.65), 240 (3.95); one; 4,6-dimethoxypyrimidine, 241 (3.50), 247 (3.88); 5-methyl-4,6-dihydroxypyrimidine, 260 (4.09), 250 (3.97), 258 (4.02); 5-methyl-4-hydroxy-1-methyl-, 261.5 (4.02), 251 (3.90), 261 (3.92); pyrimidin-6-one; 5-methyl-4-methoxy-1H-, 245.5 (3.76), 254 (4.00), 243.5 (3.79); pyrimidin-6-one, 267.5 (3.77); 5-methyl-4-methoxy-1-methyl-, 249 (3.63), 254 (3.95); pyrimidin-6-one, 270 (3.71); The existence of I as 4-hydroxy-3H-pyrimidin-6-one is excluded by the lack of bathochromic shifts for the corresponding N-methyl derivs. and by analogy with 4-hydroxypyrimidine.

IT **24391-38-6**, 4,6(1H,5H)-Pyrimidinedione, 1-methyl-  
**89532-82-1**, 4,6(1H,5H)-Pyrimidinedione, 1,5-dimethyl-  
 (enolization of, spectrum and)

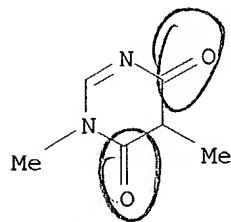
RN 24391-38-6 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 89532-82-1 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 1,5-dimethyl- (7CI) (CA INDEX NAME)



L18 ANSWER 134 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1964:468700 CAPLUS

DN 61:68700

OREF 61:11876a-c

TI Simple pyrimidines. VI. The dominant tautomer in aqueous 4-hydroxy-6-mercaptopyrimidine

AU Brown, D. J.; Teitel, T.

CS Australian Natl. Univ., Canberra

SO Journal of the Chemical Society, Abstracts (1964), (Sept.), 3204-10  
CODEN: JCSAAZ; ISSN: 0590-9791

DT Journal

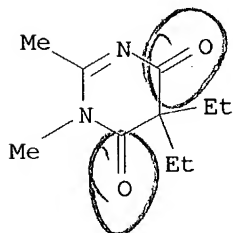
LA Unavailable

AB cf. CA 61, 2627e. Syntheses of 5,5-diethyl-1,4,5,6-tetrahydro-1,2-dimethyl-6-oxo-4-thiopyrimidine (I) and its 3-Me isomer are described. I displays a normal spectrum in cyclohexane and in alc. but not in H<sub>2</sub>O in which it exists probably as a hydrated mol. The isomer could not be obtained anhydrous. Comparison of the ultraviolet spectra of these substances (and of other fixed reference compds.) with that of 4-hydroxy-6-mercaptopyrimidine indicates that the latter exists in aqueous or alc. solution mainly as a tetrahydro-4-oxo-6-thiopyrimidine, a form which involves C-5 in tautomerism as in barbituric acid. Insertion of a 5-n-alkyl group does not alter this predominance, but the modified spectrum of the 5-isopropyl derivative suggests some steric interference.

IT 91010-99-0, 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl-  
91800-38-3, 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl-4-thio-  
94032-62-9, 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl-, hydriodide  
(preparation of)

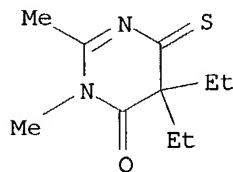
RN 91010-99-0 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl- (7CI) (CA INDEX NAME)



RN 91800-38-3 CAPLUS

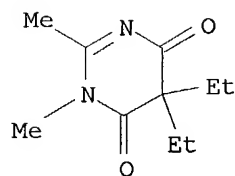
CN 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl-4-thio- (7CI) (CA INDEX NAME)



RN 94032-62-9 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl-, hydriodide (7CI)  
(CA INDEX NAME)





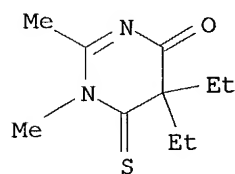
● HI

IT 91800-39-4, 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl-6-thio-

(spectrum of)

RN 91800-39-4 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl-6-thio- (7CI) (CA INDEX NAME)



L18 ANSWER 135 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1964:424707 CAPLUS

DN 61:24707

OREF 61:4162c-e

TI Tetrahydropyrimidines as antihistamines and bronchodilators

PA Ayerst, McKenna &amp; Harrison, Ltd.

SO 6 pp.

DT Patent

LA Unavailable

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 952802		19640318	GB	
	CA 706890			CA	

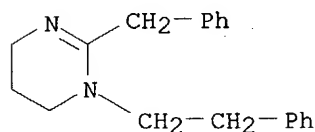
PRAI CA 19610302

AB C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>CH<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> (I) or C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>CH<sub>2</sub>NHCH(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> (II) was treated with phenylacetic acid (III) or alkyl phenylacetate or phenylacetonitrile. Thus, 32.9 g. I and 24.5 g. of III were heated at 240° for 30 min., and the H<sub>2</sub>O dist. off. IV was obtained by distillation, b<sub>0.08</sub> 165-171° (m.p. of the HBr salt, 186-8°). V was obtained with II as starting material. Both IV and V showed antihistamine properties by the guinea pig aerosol test or by the Magnus test on the isolated guinea pig ileum. Bronchodilator activity was shown in the cat by Konzelt's method and in the guinea pig aerosol test.

IT 94308-50-6, Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-1-phenethyl-  
 94679-12-6, Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-6-methyl-1-phenethyl-  
 98823-26-8, Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-1-phenethyl-, hydrobromide 99098-61-0, Pyrimidine,  
 2-benzyl-1,4,5,6-tetrahydro-6-methyl-1-phenethyl-, hydrochloride  
 (as antihistamine and bronchodilator)

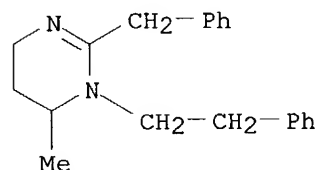
RN 94308-50-6 CAPLUS

CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-1-phenethyl- (7CI) (CA INDEX NAME)



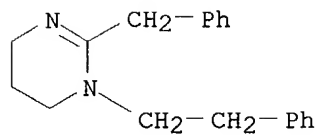
RN 94679-12-6 CAPLUS

CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-6-methyl-1-phenethyl- (7CI) (CA INDEX NAME)



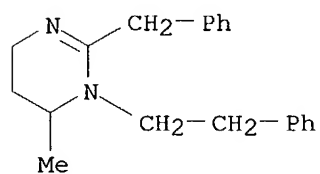
RN 98823-26-8 CAPLUS

CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-1-phenethyl-, hydrobromide (7CI) (CA INDEX NAME)



● HBr

RN 99098-61-0 CAPLUS  
 CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-6-methyl-1-phenethyl-,  
 hydrochloride (7CI) (CA INDEX NAME)



● HCl

L18 ANSWER 136 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1964:415761 CAPLUS

DN 61:15761

OREF 61:2627e-f

TI Simple pyrimidines. VII. The fine structure of 4,6-dihydroxypyrimidine

AU Brown, D. J.; Teitei, T.

CS Australian Natl. Univ., Canberra

SO Australian Journal of Chemistry (1964), 17(5), 567-72

CODEN: AJCHAS; ISSN: 0004-9425

DT Journal

LA Unavailable

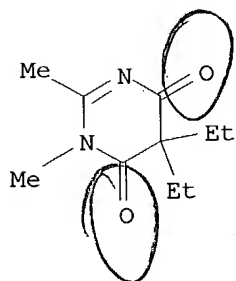
AB cf. CA 59, 11490g. The ultraviolet spectrum of 4,6-dihydroxypyrimidine was compared with those of N-, O-, and 5-alkylated derivs. of fixed structures corresponding to possible tautomeric forms. Ultraviolet spectra in aqueous buffer of neutral mols. of 5,5-diethyl-1,4,5,6-tetrahydro-1,2-dimethyl-4,6-dioxypyrimidine, 4,6-dihydroxypyrimidine, 1,6-dihydro-4-methoxy-1-methyl-6-oxopyrimidine, 4,6-dimethoxypyrimidine, and 1,4-dihydro-6-methoxy-1-methyl-4-oxopyrimidine and ultraviolet spectra in alc. of 4,6-dihydroxy-5-methylpyrimidine, 4,6-dihydroxy-5-isopropylpyrimidine, 4,6-dihydroxy-2-n-propylpyrimidine, and 4,6-dihydroxypyrimidine were determined. An aqueous solution consisted essentially of

1,4,5,6-tetrahydro-4,6-dioxypyrimidine in equilibrium with a smaller amount of 1,4-dihydro-6-hydroxy-4-oxopyrimidine. The existence of the active 5-methylene grouping within the ring was confirmed chemical by a ready condensation of benzaldehyde with the pyrimidine in aqueous solution

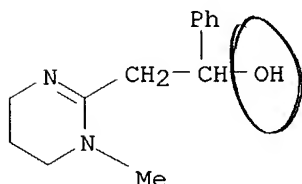
IT **91010-99-0**, 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl- (spectrum and structure of)

RN 91010-99-0 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl- (7CI) (CA INDEX NAME)

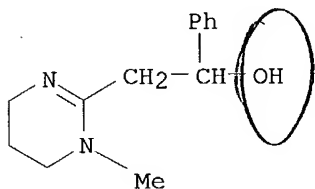


L18 ANSWER 137 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1964:411347 CAPLUS  
 DN 61:11347  
 OREF 61:1862h,1863a-b  
 TI The synthesis of phenobarbital-5 14C  
 AU Benakis, Achille  
 SO Rapport CEA-R - France, Commissariat a l'Energie Atomique (1964), R 2406,  
 9 pp.  
 CODEN: CMEAAQ; ISSN: 0429-3460  
 DT Journal  
 LA Unavailable  
 AB The synthesis of phenobarbital having 14C in position 5 of the pyrimidine  
 ring became necessary in order that research in metabolism, which was  
 begun using phenobarbital marked in ring position 2, could be continued.  
 The 14C was introduced into the desired position in the compound in a series  
 of 7 steps, beginning with C6H414CO2H having a sp. activity 25  
 mc./millimole. Distillation and extraction techniques were used to effect the  
 transference, the stages of which follow: The products at the different  
 stages were checked by gas phase chromatography; the yield of the pure  
 product with respect to the original benzoic acid used was about 3%; the  
 final product m. 172-3°; its sp. activity was 11.15 mc./millimole,  
 and its purity (paper chromatography) 99%.  
 IT **26133-47-1**, 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl-  
 α-phenyl-, hydrochloride  
 (preparation of)  
 RN 26133-47-1 CAPLUS  
 CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl-α-phenyl-,  
 monohydrochloride (8CI) (CA INDEX NAME)



● HCl

L18 ANSWER 138 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1964:411346 CAPLUS  
DN 61:11346  
OREF 61:1862g-h  
TI Derivatives of 2-(2-pyrimidinyl)acetophenone  
AU Ebetino, Frank F.; Amstutz, E. D.  
CS Norwich Pharm. Co., Norwich, NY  
SO Journal of Medicinal Chemistry (1964), 7(3), 389  
CODEN: JMCMAR; ISSN: 0022-2623  
DT Journal  
LA Unavailable  
AB A series of derivs. of the title compound was prepared as possible diuretics.  
IT **26133-47-1**, 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl-  
 $\alpha$ -phenyl-, hydrochloride  
(preparation of)  
RN 26133-47-1 CAPLUS  
CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -phenyl-,  
monohydrochloride (8CI) (CA INDEX NAME)



● HCl

L18 ANSWER 139 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1964:82899 CAPLUS  
 DN 60:82899

OREF 60:14517h,14518a-d

TI 2-Benzyl-3-phenethyltetrahydropyrimidines

IN Langis, Andre L.; Pilkington, Cedric A.

PA American Home Products Corp.

SO 3 pp.

DT Patent

LA Unavailable

*Same as #135*

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI US 3126381		19640324	US	
FR 1403616			FR	

PRAI CA 19610302

AB A mixture formed by the portionwise addition of 208.12 g.  $\beta$ -phenethylamine (I) to 183.5 g. acrylonitrile (II) was left at room temperature 24 hrs. and then

refluxed 2 hrs., the excess II evaporated in vacuo, and the residue distilled to

give 3-( $\beta$ -phenethyl-amino)propionitrile (III), b0.04 123-9°;

III.HCl m. 181-4°. A solution of 41.9 g. III in 100 ml. dry Et2O was added dropwise at a reaction temperature below 10° to 9.5 g. LiAlH4 in 500 ml. dry Et2O, the mixture stirred 30 min. at room temperature, again cooled to

10°, and treated dropwise with 10 ml. H2O, 25 ml. 25% NaOH solution, and 10 ml. H2O, the inorg. salts filtered off and washed with acetone, and the solvent evaporated in vacuo to yield 3-(phenethylamino)propylamine (IV), b10 155-63°; IV.2HCl m. 285-91°. IV was also prepared by the catalytic reduction of a mixture of 500 g. III, 2000 ml. MeOH, 374 g. NH3, and 50 g. Raney Ni in a stainless steel bomb at 300 lb./in.2, and 40° 43 hrs. A mixture of 32.9 g. IV and 25.4 g. PhCH2CO2H heated at 240° 30 min. and the H2O distilled as it was formed gave 1-phenethyl-2-benzyl-3,4,5,6-tetrahydropyrimidine (V), b0.08 165-71°; V.HBr m. 186-8°. V was similarly prepared by treating IV with Et

phenylacetate or IV.2HCl with phenylacetonitrile. 3-(Phenethylamino)butyronitrile (VI), b0.08 127-30° was prepared by a method similar to that used for III using I and 3-butenenitrile. VI was then converted by the above procedures to 3-(phenethylamino)butylamine (VII), b10 148°; VII.2HCl m. 224-5°. An aqueous solution of 15.7 g. VII, 50 ml. H2O, and 30 g. p-toluenesulfonic acid in 160 ml. H2O was evaporated to dryness and the residual solid mass triturated with Et2O to give VII bis(p-toluenesulfonate) (VIII). A mixture of 24.5 g. VIII, 9.6 g. VII, and 5.85 g. benzyl cyanide was heated at 200° 9 hrs., cooled, treated with 20% NaOH solution, and extracted with CHCl3, the CHCl3 extract

washed

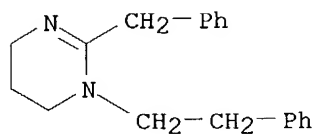
with H2O, dried over Na2SO4, and evaporated in vacuo, and the residue distilled in vacuo to yield 1-phenethyl-2-benzyl-6-methyl-3,4,5,6-tetrahydropyrimidine, b0.04 177-80°; HCl salt m. 135-7°. A mixture of 129.5 g. 1,3-propanediamine and 94.5 g. Et phenyl-acetate was heated at 100° 12 hrs. in an autoclave and filtered and the filtrate distilled in vacuo to give 2-benzyl-3,4,5,6-tetrahydropyrimidine (IX), b8 176-82°, m. 115-18° (acetone). To 3 g. IX in 25 ml. iso-PrOH were added 1.8 g. Na2CO3 and 3.15 g. phenethyl bromide, the mixture refluxed with stirring 18 hrs., and the solvent removed in vacuo to give IX.HBr, m. 185-6° (iso-PrOH).

IT 94308-50-6, Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-1-phenethyl-  
 94679-12-6, Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-6-methyl-1-

phenethyl- **98823-26-8**, Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-1-phenethyl-, hydrobromide **99098-61-0**, Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-6-methyl-1-phenethyl-, hydrochloride (preparation of)

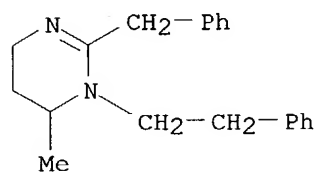
RN 94308-50-6 CAPLUS

CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-1-phenethyl- (7CI) (CA INDEX NAME)



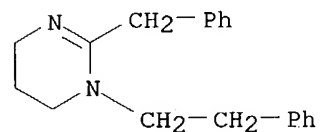
RN 94679-12-6 CAPLUS

CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-6-methyl-1-phenethyl- (7CI) (CA INDEX NAME)



RN 98823-26-8 CAPLUS

CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-1-phenethyl-, hydrobromide (7CI) (CA INDEX NAME)

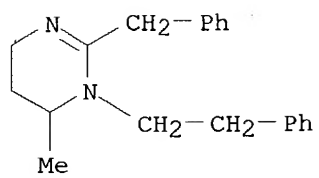


● HBr

RN 99098-61-0 CAPLUS

CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-6-methyl-1-phenethyl-, hydrochloride (7CI) (CA INDEX NAME)





● HCl

L18 ANSWER 141 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1964:52747 CAPLUS  
 DN 60:52747

OREF 60:9276g-h, 9277a-c

TI Synthesis of pyridazino[3,2-b]quinazol-10-ones

AU Beyer, Hans; Voelcker, Carl-Eduard

CS Univ. Greifswald, Germany

SO Ber. (1964), 97(2), 390-5

DT Journal

LA Unavailable

AB A series of substituted pyridazino[3,2-b]quinazol-10-ones (I) was synthesized from the appropriate 3-halopyridazines with o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H (II) or o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Et (III). 3,6-Dichloropyridazine (IV) and II in 2:1 H<sub>2</sub>O-EtOH refluxed with concentrated HCl yielded 82% I (R = Cl, R' = R'' = H) (V), yellow, m. 223° (PrOH). IV and III heated slowly to 110-20° yielded 69% V. V in aqueous HI refluxed 20 min. with red P yielded 93% I (R = I, R' = R'' = H), yellow, m. 190-5° (decomposition). 3-Chloro-6-methylpyridazine, II, and concentrated HCl in aqueous EtOH refluxed

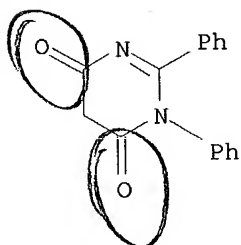
3

hrs. yielded 58% I.HCl (R = Me, R' = R'' = H) (VI.HCl), m. 255° (decomposition) (PrOH). VI.HCl with aqueous dilute NaOH gave the Na salt of N-(6-methyl-3-pyridazinyl)anthranilic acid which was reconverted with HCl to VI.HCl. II with 3-chloro-6-phenylpyridazine yielded similarly 78% I.HCl (R = Ph, R' = R'' = H) (VII.HCl), m. 242° (decomposition) (H<sub>2</sub>O); VII, greenish yellow, m. 191-2° (decomposition). 3-Chloro-5,6-diphenylpyridazine and II yielded in the usual manner 83% I.HCl (R = R' = Ph, R'' = H) (VIII.HCl), yellow, m. 230-5° (decomposition); VIII, 80%, brilliant yellow, m. 189-90° (decomposition). IV refluxed with HI and red P gave 87% 3,6-diiodopyridazine (IX), leaflets, decomposed 159-60° with the elimination of iodine (EtOH). Similarly were prepared the following I (R, R', R'', % yield, appearance, m.p., starting material given): Br, H, H (X), 87, lemon-yellow, 210° (EtOH), 3,6-dibromopyridazine; I, H, H, 65, yellow, 190-5° (decomposition) (EtOH), IX; Cl, H, Me, 73, yellow, 230° (decomposition) (PrOH), 3,6-dichloro-4-methylpyridazine; Cl, H, Cl, 60, yellow, 245-7° (decomposition) (PrOH), 3,4,6-trichloropyridazine; Cl, Cl, Cl, 70, yellow, 254° (decomposition) (PrOH), 3,4,5,6-tetrachloropyridazine; Et, H, H, 55, needles, -- [HCl salt m. 248° (decomposition) (PrOH)], 3-chloro-6-ethylpyridazine; MeO, H, H (XI), 84, pale yellow needles, 210-11° (decomposition) (MeOH), 3-chloro-6-methoxypyridazine. V and aqueous Ba(OH)<sub>2</sub> refluxed to solution gave 91% Ba N-(6-chloro-3-pyridazinyl)anthranilate-6H<sub>2</sub>O (XII), needles from H<sub>2</sub>O. X and XI yielded similarly the 6-Br analog and 6-MeO analog of XII, resp., in 88 and 90% yield, resp. The infrared absorption spectrum of V is recorded.

IT 94205-66-0, 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- (preparation of)

RN 94205-66-0 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- (7CI, 9CI) (CA INDEX NAME)



L18 ANSWER 142 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1964:52746 CAPLUS

DN 60:52746

OREF 60:9276d-g

TI Tautomerism of 1,2-disubstituted 4,6-dioxotetrahydropyrimidines

AU Dashkevich, L. B.; Siraya, V. M.

SO Trudy Leningradskogo Khimiko-Farmatsevticheskogo Instituta (1962), No. 16, 202-5

From: Ref. Zh., Khim. 1963, Abstr. No. 14Zh214.

CODEN: TLKFAD; ISSN: 0371-9235

DT Journal

LA Unavailable

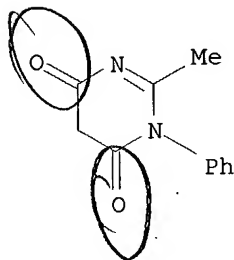
AB Dioxotetrahydropyrimidines (I), obtained on reactions of C3O2 with N-substituted amidines, are capable of keto-enol tautomerism which is verified by acylation of their mono-enol form; formation of the enol form is secured by establishing a  $\pi$ -conjugate in the pyrimidine ring. Good crystallizing p-nitrobenzoyl derivs. (II) of I are proposed for identification purposes. Benzamidine (III) with C3O2, instead of the expected I, forms N,N'-malonylbis(benzamidine) (IIIa), apparently as a consequence of the difference of the basicity of the amine and imine forms of III. A solution of 1.5 g. III in 50 ml. absolute ether is treated with 0.5 g. C3O2 with heating to give 65% IIIa, m. 243-4° (EtOH). Analogously, 1 g. p-toluamidine in 100 ml. dry acetone and C3O2 gives 50% I (R = H, R' = p-tolyl), m. 265-7° (MeOH); p-nitrobenzoate m. 188° (EtOH). To 0.3 g. I in CHCl3, a solution of 0.6 g. p-nitrobenzoyl chloride is added, and the mixture concentrated to give the II derivative of I [R, R', and m.p. (EtOH)]

p-nitrobenzoate given]: Et, Ph, 128-9°; Ph, Me, 160-1°; Ph, PhCH2, 139-40°; Ph, Ph, 194-5°; Ph, p-MeC6H4, 222-3°; o-MeC6H4, Ph, 230-1°; p-MeC6H4, Ph, 194-5°; o-MeC6H4, p-MeC6H4, 164-5°; p-MeC6H4, o-MeC6H4, 176-7°.

IT 7348-62-1, 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl-  
 91392-65-3, 4,6(1H,5H)-Pyrimidinedione, 1-ethyl-2-phenyl-  
 94205-66-0, 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl-  
 94209-30-0, 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl-  
 94209-31-1, 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl-  
 94541-58-9, 4,6(1H,5H)-Pyrimidinedione, 2-benzyl-1-phenyl-  
 94541-61-4, 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl-  
 94541-62-5, 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl-  
 (preparation of)

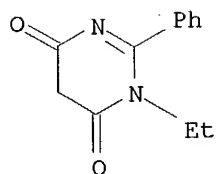
RN 7348-62-1 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

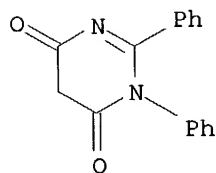


RN 91392-65-3 CAPLUS

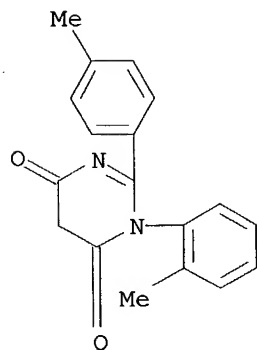
CN 4,6(1H,5H)-Pyrimidinedione, 1-ethyl-2-phenyl- (7CI) (CA INDEX NAME)



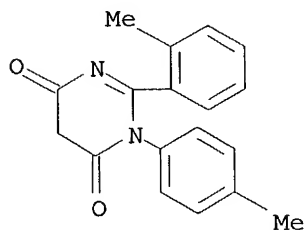
RN 94205-66-0 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- (7CI, 9CI) (CA INDEX NAME)



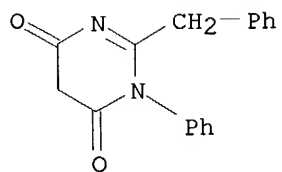
RN 94209-30-0 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl- (7CI) (CA INDEX NAME)



RN 94209-31-1 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl- (7CI) (CA INDEX NAME)

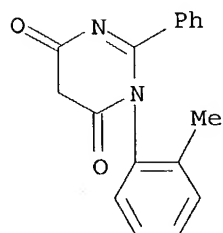


RN 94541-58-9 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 2-benzyl-1-phenyl- (7CI) (CA INDEX NAME)



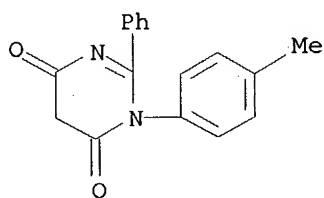
RN 94541-61-4 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl- (7CI) (CA INDEX NAME)



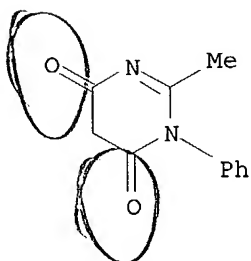
RN 94541-62-5 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl- (7CI) (CA INDEX NAME)

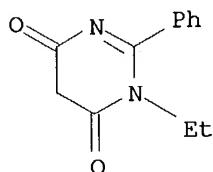


L18 ANSWER 143 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1963:462427 CAPLUS  
 DN 59:62427  
 OREF 59:11524h,11525a  
 TI 1,2 - Disubstituted 4,6 - dioxotetrahydropyrimidines  
 IN Dashkevich, L. B.; Siraya, V. M.  
 SO From: Byul. Izobret. i Tovarnykh Znakov 1963, No. 1, 11..  
 DT Patent  
 LA Unavailable

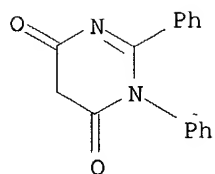
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	SU 152465		19630212	SU	19611220
AB	C8O2 is used in the preparation of the title product with N-substituted amidines as the starting materials. The process is carried out in the presence of anhydrous AlCl <sub>3</sub> as catalyst.				
IT	<b>7348-62-1</b> , 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- <b>91392-65-3</b> , 4,6(1H,5H)-Pyrimidinedione, 1-ethyl-2-phenyl- <b>94205-66-0</b> , 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- <b>94209-29-7</b> , 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl- <b>94209-30-0</b> , 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl- <b>94209-31-1</b> , 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl- <b>94541-58-9</b> , 4,6(1H,5H)-Pyrimidinedione, 2-benzyl-1-phenyl- <b>94541-59-0</b> , 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-o-tolyl- <b>94541-61-4</b> , 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl- <b>94541-62-5</b> , 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl- (preparation of)				
RN	7348-62-1	CAPLUS			
CN	4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)				



RN 91392-65-3 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 1-ethyl-2-phenyl- (7CI) (CA INDEX NAME)

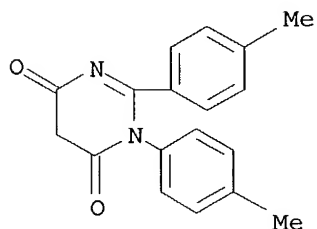


RN 94205-66-0 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- (7CI, 9CI) (CA INDEX NAME)



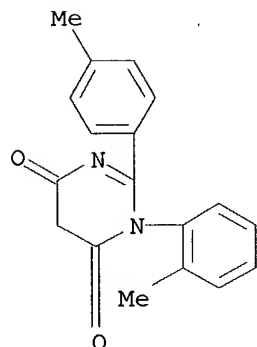
RN 94209-29-7 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl- (7CI) (CA INDEX NAME)



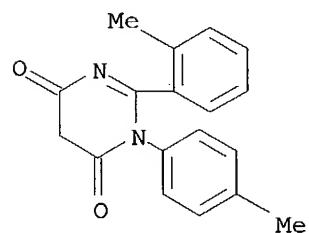
RN 94209-30-0 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl- (7CI) (CA INDEX NAME)



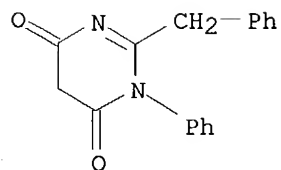
RN 94209-31-1 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl- (7CI) (CA INDEX NAME)



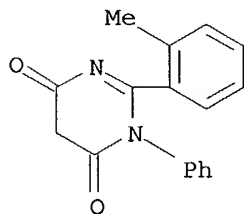
RN 94541-58-9 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-benzyl-1-phenyl- (7CI) (CA INDEX NAME)



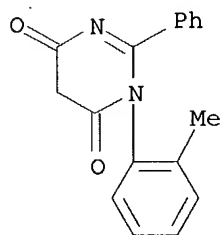
RN 94541-59-0 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-o-tolyl- (7CI) (CA INDEX NAME)



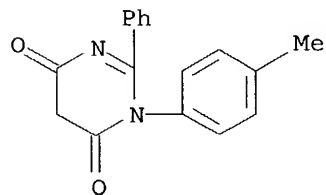
RN 94541-61-4 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl- (7CI) (CA INDEX NAME)



RN 94541-62-5 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl- (7CI) (CA INDEX NAME)





L18 ANSWER 144 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1963:462426 CAPLUS  
 DN 59:62426  
 OREF 59:11524f-h  
 TI Piperazine derivatives  
 PA Wellcome Foundation Ltd.  
 SO 5 pp.  
 DT Patent  
 LA Unavailable

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 619225		19621221	BE	
	FR 1327451			FR	
	GB 1032251			GB	

PRAI GB 19610622

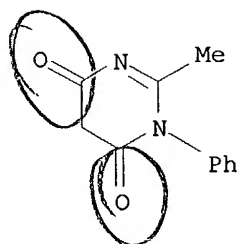
AB These compds. possessed anthelmintic properties, especially against Dictyocaulus

filaria in guinea pigs, and were used, with appropriate vehicles, orally and parentally. To an agitated and cooled mixture containing 10 g. 1-methylpiperazine in 150 cc. Me<sub>2</sub>CO and 10.6 g. anhydrous Na<sub>2</sub>CO<sub>3</sub>, a solution of 14.3 g. 2-chloroethylchloroformate in 14 cc. Me<sub>2</sub>CO was slowly added, after which mixing was continued an addnl. hr., and then filtered. The filtrate, to which 10 cc. N HCl was added, was evaporated to dryness, and the solid residue crystallized from EtOH or a mixture of EtOAc and EtOH, to yield 1-(2-chloroethoxy)carbonyl-4-methylpiperazine (I)-HCl, prisms, m 161.5-2.0°. Using 3-chloropropyl chloroformate, and treating the basic solution with p-toluenesulfonic acid, 1-(3-chloropropoxy)carbonyl-4-methylpiperazine p-toluenesulfonate, m. 132-4°, was obtained. Similarly prepared was 1-(2-chloro-1-methylethoxy)carbonyl-4-methylpiperazine-HCl, m. 169-70°, using 2-chloro-methylethyl chloroformate.

IT 7348-62-1, 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl-  
 91392-65-3, 4,6(1H,5H)-Pyrimidinedione, 1-ethyl-2-phenyl-  
 94205-66-0, 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl-  
 94209-29-7, 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl-  
 94209-30-0, 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl-  
 94209-31-1, 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl-  
 94541-58-9, 4,6(1H,5H)-Pyrimidinedione, 2-benzyl-1-phenyl-  
 94541-59-0, 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-o-tolyl-  
 94541-61-4, 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl-  
 94541-62-5, 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl-  
 (preparation of)

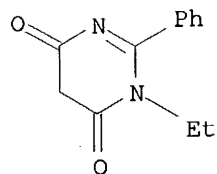
RN 7348-62-1 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

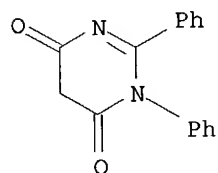


RN 91392-65-3 CAPLUS

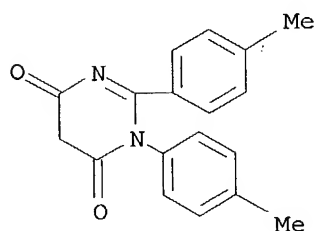
CN 4,6(1H,5H)-Pyrimidinedione, 1-ethyl-2-phenyl- (7CI) (CA INDEX NAME)



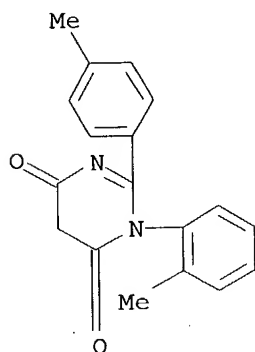
RN 94205-66-0 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- (7CI, 9CI) (CA INDEX NAME)



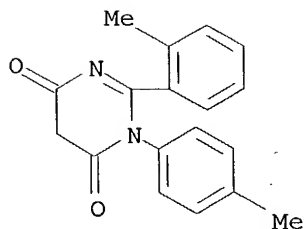
RN 94209-29-7 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl- (7CI) (CA INDEX NAME)



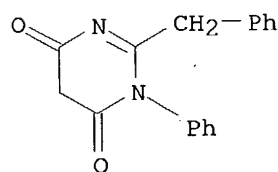
RN 94209-30-0 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl- (7CI) (CA INDEX NAME)



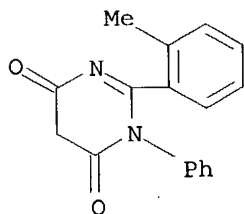
RN 94209-31-1 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl- (7CI) (CA INDEX NAME)



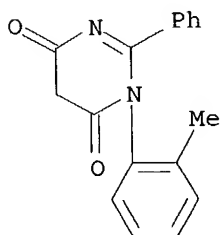
RN- 94541-58-9 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 2-benzyl-1-phenyl- (7CI) (CA INDEX NAME)



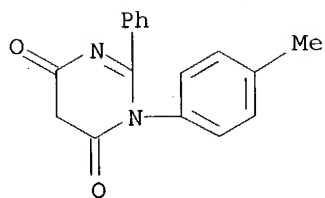
RN 94541-59-0 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-o-tolyl- (7CI) (CA INDEX NAME)



RN 94541-61-4 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl- (7CI) (CA INDEX NAME)



RN 94541-62-5 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl- (7CI) (CA INDEX NAME)



L18 ANSWER 145 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1963:67079 CAPLUS

DN 58:67079

OREF 58:11524h,11525a

TI An investigation of the structure of furfuryl alcohol polycondensates with infrared spectroscopy

AU Conley, Robert T.; Metil, Ignatius

CS Seton Hall Univ., South Orange, NJ

SO Journal of Applied Polymer Science (1963), 7(No. 1), 37-52

CODEN: JAPNAB; ISSN: 0021-8995

DT Journal

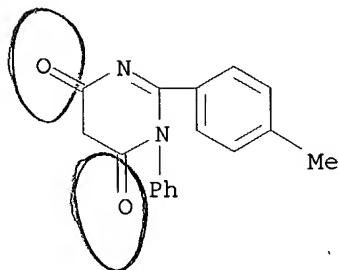
LA Unavailable

AB The effect of catalysts, solvents, polymerization time, and atmospheric were studied for their effects on the chemical structure of Furan resins prepared by the polymerization of furfuryl alc. with either acid or thermal catalysis. The resins contained appreciable amts. of ketonic species, and the infrared spectrum indicated that the relative amount of ketonic to furan ring-containing species was the same, regardless of the resin viscosity. It is proposed that the ketonic species arise during the polymerization by ring-opening of the furan unit, forming  $\gamma$ -diketone functional systems as part of the polymer unit. From heat-catalyzed resins, a lactonic component identified as 5-hydroxy-3-penteno- $\gamma$ -lactone was isolated. The curing of furan resins in N proceeds through further condensation of furan methylol groups with furan rings having an available  $\alpha$ -H.  $\beta$ -H cross-linking reactions were not detected by infrared examination of the curing process.

IT 94541-60-3, 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-p-tolyl- (preparation of)

RN 94541-60-3 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-p-tolyl- (7CI) (CA INDEX NAME)



L18 ANSWER 146 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1963:67078 CAPLUS

DN 58:67078

OREF 58:11524f-h

TI Effect of nonionic surfactants on the stability of sodium oleate-stabilized polystyrene latex

AU Aleksandrova, E. M.; Shits, L. A.; Romm, I. P.

CS D. I. Mendeleev Chem.-Technol. Inst., Moscow

SO Doklady Akademii Nauk SSSR (1963), 148, 637-40

CODEN: DANKAS; ISSN: 0002-3264

DT Journal

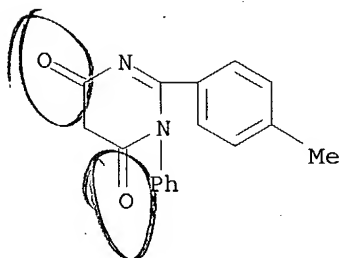
LA Unavailable

AB The effects of nonionic surfactants on the stability of Na oleate (I)-stabilized polystyrene latexes to aggregation under shear between 2 rotating coaxial cylinders were studied. The stability of latexes having surfaces fully covered with a monolayer of I increased upon addition of the nonionic agent, whereas the stability of partly covered latexes decreased until the nonionic agent completely displaced I and covered the particle surface. The agents studied were, in order of decreasing antistabilizing power: polyethylene glycol ethers of steared glucose > RO(CH<sub>2</sub>CH<sub>2</sub>O)nH (R = C<sub>16-18</sub>, n = 20) > 2,4-R<sub>2</sub>C<sub>6</sub>H<sub>3</sub>O(CH<sub>2</sub>CH<sub>2</sub>)nH (R = C<sub>8-10</sub>) (II) (n = 20) > II (n = 10) > II (n = 7), which corresponds to the order of decreasing dipole moments.

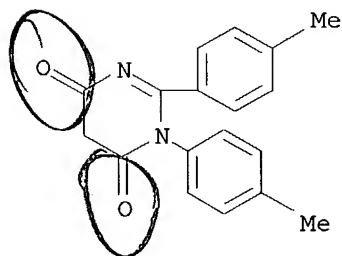
IT 94541-60-3, 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-p-tolyl- (preparation of)

RN 94541-60-3 CAPLUS

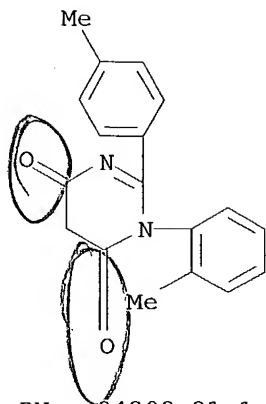
CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-p-tolyl- (7CI) (CA INDEX NAME)



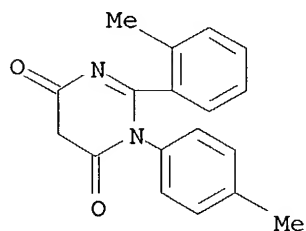
L18 ANSWER 147 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1963:46741 CAPLUS  
 DN 58:46741  
 OREF 58:7946c-d  
 TI Carbon suboxide and some of its reactions. XIII. Reaction of carbon suboxide with N-aryl aromatic amidines  
 AU Dashkevich, L. B.  
 CS Chem.-Pharm. Inst., Leningrad  
 SO Zhurnal Obshchei Khimii (1962), 32, 2346-7  
 CODEN: ZOKHA4; ISSN: 0044-460X  
 DT Journal  
 LA Unavailable  
 OS CASREACT 58:46741  
 AB cf. CA 55, 8287h. C3O2 and aromatic amidines in Et2O mixed in the presence of catalytic amts. of AlCl3 in 1.5 hrs. gave 60-80% I (R, R', and m.p. given): Ph, Ph, 212-13°; o-tolyl, Ph, 212-14°; p-tolyl, Ph, 228-9°; Ph, o-tolyl, 246-7°; p-tolyl, o-tolyl, 242-3°; Ph, p-totyl, 229-30°; o-tolyl, p-tolyl, 234-5°; p-tolyl, p-tolyl, 230-1°. Thus, the cyclization of RC(:NH)NHR' with C3O2 yields a tetrahydropyrimidine ring.  
 IT 94209-29-7, 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl-  
 94209-30-0, 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl-  
 94209-31-1, 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl-  
 94541-59-0, 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-o-tolyl-  
 94541-60-3, 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-p-tolyl-  
 94541-61-4, 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl-  
 94541-62-5, 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl-  
 (preparation of)  
 RN 94209-29-7 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl- (7CI) (CA INDEX NAME)



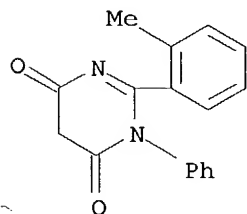
RN 94209-30-0 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl- (7CI) (CA INDEX NAME)



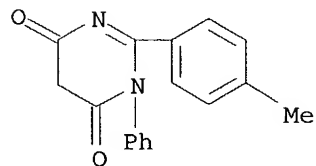
RN 94209-31-1 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl- (7CI) (CA INDEX NAME)



RN 94541-59-0 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-o-tolyl- (7CI) (CA INDEX NAME)

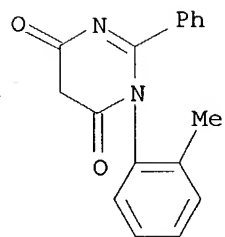


RN 94541-60-3 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-p-tolyl- (7CI) (CA INDEX NAME)



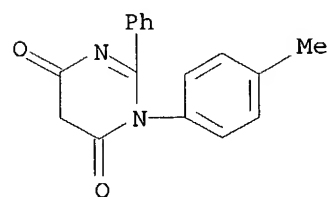
RN 94541-61-4 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl- (7CI) (CA INDEX NAME)





RN 94541-62-5 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl- (7CI) (CA INDEX NAME)



L18 ANSWER 148 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1963:46740 CAPLUS

DN 58:46740

OREF 58:7946a-c

TI Carbon suboxide and some of its reactions. XII. Reaction of carbon suboxide with primary aliphatic diamines, diamides, and hydrazine derivatives

AU Dashkevich, L. B.; Siraya, V. M.

CS Chem.-Pharm. Inst., Leningrad

SO Zhurnal Obshchei Khimii (1962), 32, 2330-3

CODEN: ZOKHA4; ISSN: 0044-460X

DT Journal

LA Unavailable

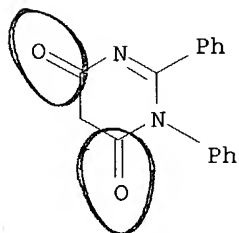
OS CASREACT 58:46740

AB cf. CA 57, 8556b. Passage of C3O2 into (CH2NH2)2.H2O in absolute Et2O gave 100% crystalline precipitate of I (n = 2), decomposed 142°, red with FeCl3, isolated as a hydrate which could not be made anhydrous without total decomposition (CH2)4(NH2)2 similarly gave I (n = 4), m. 151-2°, while (CH2)6(NH2)2 gave I (n = 6), decomposed 145-7°. C3O2 and OC(NH2)2 in Me2CO gave in 2 hrs. refluxing 38% N-acetylurea; SC(NH2)= gave 40% N-acetylthiourea. Passage of C3O2 into a solution of OC(NH2)2 in Me2CO in the presence of AlCl3 gave 75% barbituric acid; thiourea similarly gave 57% thiobarbituric acid. C3O2 passed into (PhNH)2 in Me2CO in the presence of AlCl3 at reflux gave 78% 1,2-diphenyl-3,5-dioxypyrazolidine, m. 172-3°. Similarly, (MeNH)2 gave 62% 1,2-dimethyl-3,5-dioxypyrazolidine, m. 167-8°.

IT 94205-66-0, 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl-  
(preparation of)

RN 94205-66-0 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- (7CI, 9CI) (CA INDEX NAME)



L18 ANSWER 149 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1963:14914 CAPLUS  
 DN 58:14914

OREF 58:2458h,2459a-h

TI Halogenated derivatives of tetrahydro-1-naphthyl cyclic amidines

PA Chas. Pfizer & Co., Inc.

SO 9 pp.

DT Patent

LA Unavailable

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 877306		19610913	GB	
PRAI	US		19580421		

PI GB 877306

PRAI US

AB Attaching one or more halogen atoms in the 5-, 6-, 7-, or 8-position as indicated in I, where X is one or more atoms of Cl, Br, iodine, or F, n is 2 or 3, and R is H or a lower alkyl or alkenyl radical of 1-5 C atoms, gives compds. (I) useful in producing, in animal organisms, varying responses of the depressor, blood-pressure lowering, adrenergic blocking, and cardiac-rate decrease. I may be employed as an acid-addition salt, e.g., tartrate, nitrate, sulfate, or acetate. Thus, 260 g. heated KCN added in 300 ml. H<sub>2</sub>O to 500 g. com.  $\alpha,\alpha$ -dichlorotoluene in 600 ml. EtOH with stirring during 2 hrs., refluxed with stirring 5 hrs., KCl filtered off, the alc. distilled, the residue dissolved in a 2-phase mixture of H<sub>2</sub>O and CHCl<sub>3</sub>, the H<sub>2</sub>O layer separated and discarded, and the CHCl<sub>3</sub> layer distilled gave 415 g.  $\alpha$ -ClC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CN (II), b<sub>2</sub> 106-11°. II (152 g.), 450 g. aqueous 95% EtOH, and 450 g. aqueous 96% H<sub>2</sub>SO<sub>4</sub> refluxed 4 hrs.,

poured onto ice, extracted with CHCl<sub>3</sub>, and the CHCl<sub>3</sub> separated and distilled gave 182 g.

$\alpha$ -ClC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CO<sub>2</sub>Et (III), b<sub>1.3-1.5</sub> 100-3°. Me acrylate (43.1 g.) added dropwise with stirring during 30 min. to a slurry of 99.3 g. III and 3.5 g. alc.-free NaOMe at 30-40° under N in a sealed flask, stirred an addnl. hr., 10 ml. glacial AcOH added, poured into H<sub>2</sub>O (a H<sub>2</sub>O-immiscible oil separated), CHCl<sub>3</sub> added to sep. the oil, and the CHCl<sub>3</sub> layer distilled gave 110 g. Me Et  $\alpha$ -( $\alpha$ -chlorophenyl)glutarate (IV), b<sub>1.2-1.5</sub> 150-5°, n<sub>D</sub><sup>20</sup> 1.5100. IV (102 g.), 40 g. NaOH, 400 ml. H<sub>2</sub>O, and 400 ml. iso-PrOH refluxed 15 hrs., most of the alc. distilled, the concentrate diluted with H<sub>2</sub>O, extracted with CHCl<sub>3</sub>, the CHCl<sub>3</sub> layer separated

and

discarded, the aqueous layer acidified to precipitate a solid, and the precipitate recrystd.

from dilute AcOH, filtered, and dried gave 79 g.  $\alpha$ -( $\alpha$ -chlorophenyl)glutaric acid (V), m. 144-5°. V (61 g.) refluxed in 200 ml. Ac<sub>2</sub>O 4 hrs. and distilled to yield an oil which solidifies gave 48 g.  $\alpha$ -( $\alpha$ -chlorophenyl)glutaric anhydride (VI), m. 132-3°. VI (52 g.) added to 67 g. anhydrous AlCl<sub>3</sub> in 450 ml. PhNO<sub>2</sub>, held at 50-60° 2.5 hrs., poured into dilute HCl, the PhNO<sub>2</sub> steam-distilled, the residue concentrated to an oily appearance, extracted with Et<sub>2</sub>O, the Et<sub>2</sub>O phase separated, washed with H<sub>2</sub>O, dried, and the Et<sub>2</sub>O distilled gave 55 g. crude 8-chloro-4-oxo-1,2,3,4-tetrahydro-1-naphthoic acid (VII) (2,4-dinitrophenylhydrazone m. 260-1°). VII (55 g.) refluxed in 50 ml. aqueous 85% N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O 15 min., 30 g. KOH and 175 ml. C<sub>2</sub>H<sub>4</sub>(OH)<sub>2</sub> added, refluxed at about 140° an addnl. 2 hrs., distilled until reflux temperature reaches 180°, refluxed an addnl. 3 hrs., poured into 500 ml. H<sub>2</sub>O, C added, filtered, acidified, and the precipitate filtered off and dried gave 22

g.

8-chloro-1,2,3,4-tetrahydro-1-naphthoic acid (VIII), m. 159-60°. The filtrate concentrated gave 13 g. addnl. VIII. VIII (22 g.), 50 ml. SOCl<sub>2</sub>,

and 50 ml. benzene refluxed 3 hrs., excess SOCl<sub>2</sub> and benzene distilled, the residue dissolved in 50 ml. dioxane and added to 100 ml. aqueous 28% NH<sub>4</sub>OH and ice with stirring, and the solid filtered off and dried gave 22 g. crude 8-chloro-1,2,3,4-tetrahydro-1-naphthamide (IX), m. 182-4° (dilute MeOH). IX (21 g.) and 50 ml. SOCl<sub>2</sub> in 50 ml. benzene refluxed 12 hrs., filtered, and fractionally distilled in vacuo gave 14 g. 8-chloro-1,2,3,4-tetrahydro-1-naphthonitrile (X), m. 62-3° (heptane). X (6 g.) and 16 g. ethylenediamine mono-p-toluenesulfonate heated at 200-10° 2 hrs., cooled, dissolved in dilute HCl, filtered, decolorized, made alkaline

with

NaOH, and the precipitate filtered off and recrystd. several times from EtOH

gave

5 g. 2-(8-chloro-1,2,3,4-tetrahydro-1-naphthyl)-imidazoline, m. 203-4°. The sulfate of 2-(8-chloro-1,2,3,4-tetrahydro-1-naphthyl)-1-methylimidazoline (XI) was prepared as follows: 2.8 g. X, 0.6 g. N-methylethylenediamine, and 3.4 g. N-methylethylenediamine bis-p-toluenesulfonate heated at about 200° 2 hrs., cooled, treated with dilute HCl, filtered, made alkaline with NaOH, the separated oil

extracted with

Et<sub>2</sub>O, the Et<sub>2</sub>O solution separated and dried, treated with H<sub>2</sub>SO<sub>4</sub> to precipitate

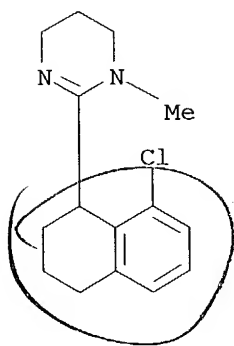
an oily

product which solidifies, and the solid filtered off and recrystd. from an EtOH-Et<sub>2</sub>O mixture gave 0.9 g. XI, m. 251-3°. The Et<sub>2</sub>O mother liquor concentrated by distillation gave 1.2 g. addnl. XI. Likewise prepared were the following: 2-(8-chloro-1,2,3,4-tetrahydro-1-naphthyl)-1,4,5,6-tetrahydropyrimidine, m. 172-3° (heptane, then dilute EtOH); 2-(8-chloro-1,2,3,4-tetrahydro-1-naphthyl)-1-methyl-1,4,5,6-tetrahydropyrimidine, m. 114-15° (heptane); 2-(6-chloro-1,2,3,4-tetrahydro-1-naphthyl)imidazoline (XII), m. 167-73° (EtOH); XII.HCl m. 228-9°; and 2-(8-bromo-1,2,3,4-tetrahydro-1-naphthyl)imidazoline, m. 209-10° (EtOH).

IT 94064-59-2, Pyrimidine, 2-(8-chloro-1,2,3,4-tetrahydro-1-naphthyl)-1,4,5,6-tetrahydro-1-methyl-  
(preparation of)

RN 94064-59-2 CAPLUS

CN Pyrimidine, 2-(8-chloro-1,2,3,4-tetrahydro-1-naphthyl)-1,4,5,6-tetrahydro-1-methyl- (6CI, 7CI) (CA INDEX NAME)



L18 ANSWER 150 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1962:475960 CAPLUS

DN 57:75960

OREF 57:15106c-i,15107a-d

TI Potential purine antagonists. XXXIV. Synthesis of 3-methylguanine and a study of the structure and chemical reactivity of certain 3-methylpurines

AU Townsend, Leroy B.; Robins, Roland K.

CS Arizona State Univ., Tempe

SO Journal of the American Chemical Society (1962), 84, 3008-12

CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA Unavailable

OS CASREACT 57:75960

AB cf. CA 57, 11197c. 3-Methylguanine (I) is synthesized. A study of the chemical properties of I and a number of related 2-amino-3-methyl-6-substituted purines reveals that the classical, fixed double-bond type structure which can be written for these compds. does not account for the observed chemical reactivity toward nucleophilic substitution. These compds. possess a high degree of aromaticity with an increased electron d. in the imidazole ring and an over-all decrease of electron d. in the pyrimidine ring. Thus, a mixture of 50 g. 3-methyl-2,4,5-triamino-6-pyrimidone sulfate and 250 ml. formamide was refluxed 1.5 hrs., cooled, and the precipitate filtered, washed with H<sub>2</sub>O and acetone to yield 27 g. I, m. about 300°. Alternatively, a solution of 0.4 g. 2-amino-6-chloro-3-methylpurine in 100 ml. N HCl was refluxed for 2 hrs., treated with charcoal, neutralized, and the precipitate filtered to yield 0.3 g. I, identified by ultraviolet

absorption

spectra and paper chromatography. A mixture of 20 g. I 100 g. P2S<sub>5</sub>, and 1400 ml. pyridine was refluxed for 16 hrs., and excess pyridine removed at 100° under reduced pressure. To the residue was added 1 l. H<sub>2</sub>O and the mixture heated at 100° for 3 hrs., cooled overnight, and the precipitate filtered off, washed with H<sub>2</sub>O, and dissolved in hot dilute aqueous NH<sub>3</sub>. The solution was treated with charcoal and acidified with glacial HOAc to pH 6 to precipitate 19 g. 2-amino-3-methyl-6-purinethione (II), m. about 300° (H<sub>2</sub>O). A solution of 1 g. I in 20ml. 2N NaOH was refluxed 4 hrs., evaporated

to

dryness in vacuo at 100°, 25 ml. H<sub>2</sub>O added, and evaporated to dryness. The residue was dissolved in hot H<sub>2</sub>O, treated with charcoal, and cooled to precipitate 0.85 g. 3-methylxanthine (III), m. about 300° (H<sub>2</sub>O). Alternatively, a solution of 1 g. 3-methyl-2-methylthio-6-purinone (IV) in 100 ml. 6N HCl was refluxed for 1 hr., evaporated to dryness in vacuo at 100°, 50 ml. H<sub>2</sub>O added, and evaporated to dryness. The residue was dissolved in 50 ml. dilute aqueous NH<sub>3</sub>, the solution treated with charcoal, neutralized with dilute glacial HOAc and cooled to precipitate 0.6 g. IV, identified by infrared and ultraviolet absorption spectra and paper chromatography. An equimolar quantity of benzyl chloride in 2.5 ml. p-dioxane was added slowly over 15 min. to a solution of 1 g. II in 25 ml. N KOH. The solution was stirred for 3 hrs. at 35-40° and cooled to precipitate 58% 2-amino-6benzylthio-3-methylpurine, m. 274° (EtOH-H<sub>2</sub>O). Similarly prepared were: 54% 2-amino-6-(o-chlorobenzylthio)-3methylpyrine, m. 276° (MeOH-H<sub>2</sub>O); 44% 2-amino-6-(ofluorobenzylthio)-3-methylpyrine, m. 282-3° (EtOH-H<sub>2</sub>O); 75% 2-amino-3-methyl-6-methylthiopurine (V), m. 289-92° (H<sub>2</sub>O); 46% 2-amino-6-ethylthio-3-methylpurine, m. 261-2° (H<sub>2</sub>O); 38% 2-amino-6-(butylthio)-3-methylpurine, m. 258-9° (H<sub>2</sub>O). Cl was passed into 30 ml. MeOH at 10° for 10 min. and 2 g. V added in small portions below 10°. The flow of Cl was stopped, the mixture stirred and cooled for 30 min. and the precipitate filtered off, washed with cold EtOH, and dried at

80° to yield 1.2 g. of the HCl salt, which was dissolved in 10 ml. H<sub>2</sub>O. The solution was treated with charcoal and neutralized with aqueous NH<sub>3</sub>

to

precipitate 1 g. 2-amino-6-chloro-3-methylpurine (VI), m. above 280° (decomposition). Similarly, 2 g. II yielded 0.8 g. VI, identified by ultraviolet and infrared spectra and paper chromatography. A mixture of 0.5 g. VI, 0.5 g. Na, and 20 ml. EtOH was refluxed 18 hrs., cooled, neutralized with 1.2 ml. glacial HOAc, and evaporated to dryness in vacuo. The residue was dissolved in 25 ml. boiling H<sub>2</sub>O, treated with charcoal, filtered, cooled and neutralized to precipitate 0.45 g. 2-amino-6ethoxy-3-methylpyrine, m. 243-4°. Similarly prepared was 2-amino-3-methyl-6-methoxypurine, m. above 300°. Just enough solid KOH to achieve solution was added to a mixture of 5 g. 2-mercapto-3-methyl-6-purinone and 50 ml. H<sub>2</sub>O. The solution was cooled to 25°, 7 g. MeI added, stirred vigorously for 2 hrs., treated with charcoal, neutralized with glacial HOAc, and cooled to precipitate 4.1 g. 3-methyl-2-methylthio-6purinone, m.

above

300°. A mixture of 0.25 g. VI and 100 ml. EtOH was refluxed for 8 hrs. while passing through the solution a stream of anhydrous NH<sub>3</sub>. The

solution

was evaporated to 50 ml. and cooled at 15° for 12 hrs. to precipitate 0.2 g. 2,6-di-amino-3-methylpurine, m. above 300° (MeOH-EtOAc). A solution of 0.5 g. VI in 30 ml. BuNH<sub>2</sub> was stirred at room temperature for 1 hr.,

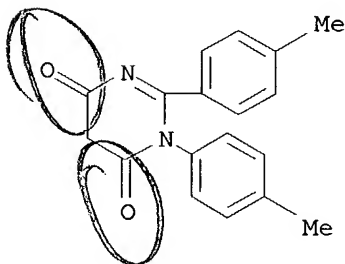
evaporated

to dryness in a stream of air, and the residue triturated with 35 ml. acetone to precipitate 0.35 g. 2-amino-6-butylamino-3-methylpurine (VII), m. 255-8° (CHCl<sub>3</sub>). Alternatively, a solution of 0.5 g. V in 25 ml. 40% aqueous BuNH<sub>2</sub> was refluxed 2 hrs., and excess BuNH<sub>2</sub> removed in vacuo at 100°. The residue was dissolved in 10 ml. H<sub>2</sub>O, acidified to pH 6, and evaporated to dryness in a stream of air to leave VII, identified by ultraviolet spectra. Ultraviolet data at pH 1 and 11 were given for the products.

IT 94209-29-7, 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl-  
(preparation of)

RN 94209-29-7 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl- (7CI) (CA INDEX NAME)



L18 ANSWER 151 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1962:475959 CAPLUS

DN 57:75959

OREF 57:15106a-c

TI A method of preparation of 1,2-substituted 4,6-dioxotetrahydropyrimidines

AU Dashkevich, L. B.

CS Chem.-Pharm. Inst., Leningrad

SO Doklady Akademii Nauk SSSR (1962), 145, 323-4

CODEN: DANKAS; ISSN: 0002-3264

DT Journal

LA Unavailable

AB cf. CA 55, 198721, 23428i. C2O3 and N-substituted amidines react in the cold to form 1,2-substituted 4,6-dioxotetrahydropyrimidines with the reaction run in absolute Et2O in the presence of AlCl3. The following 4,6-dioxotetrahydropyrimidines were prepared in 58-80% yields (1,2-substituents and m.p. shown, resp.): Ph, Me, 260-1°; Ph, PhCH2, 212-13°; Ph, Ph (I), 212-13°; o-MeC6H4, Ph, 212-14°; p-MeC6H4, Ph, 228-9°; Ph, o-MeC6H4, 246-7°; p-MeC6H4, o-MeC6H4 242-3°; Ph, p-MeC6H4, 229-30°; o-MeC6H4, p-MeC6H4, 234-5°; p-MeC6H4, p-MeC6H4, 230-1°. These are capable of forming p-nitrobenzoyl derivs. indicating the existence of enolic tautomeric forms. The reactions were run at room temperature with a few mg. AlCl3/g. amidine with shaking 1.5 h. I p-nitrobenzoyl derivative m. 194-5°.

IT 7348-62-1, 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl-

94205-66-0, 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl-

94209-29-7, 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl-

94209-30-0, 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl-

94209-31-1, 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl-

94541-58-9, 4,6(1H,5H)-Pyrimidinedione, 2-benzyl-1-phenyl-

94541-59-0, 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-o-tolyl-

94541-60-3, 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-p-tolyl-

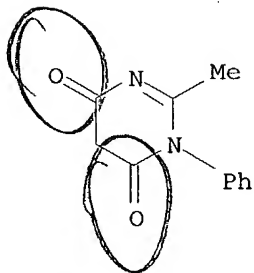
94541-61-4, 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl-

94541-62-5, 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl-

(preparation of)

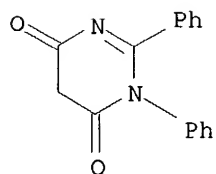
RN 7348-62-1 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

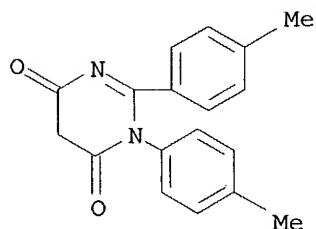


RN 94205-66-0 CAPLUS

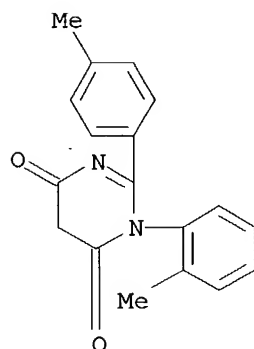
CN 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- (7CI, 9CI) (CA INDEX NAME)



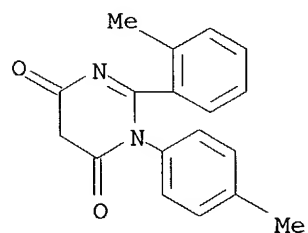
RN 94209-29-7 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl- (7CI) (CA INDEX NAME)



RN 94209-30-0 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl- (7CI) (CA INDEX NAME)

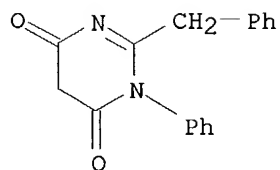


RN 94209-31-1 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl- (7CI) (CA INDEX NAME)

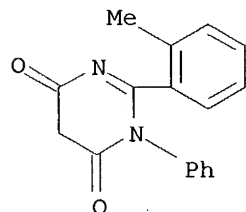


RN 94541-58-9 CAPLUS  
CN 4,6(1H,5H)-Pyrimidinedione, 2-benzyl-1-phenyl- (7CI) (CA INDEX NAME)

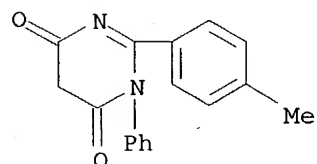




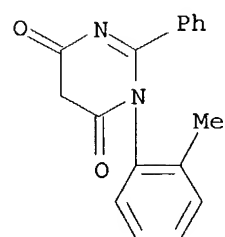
RN 94541-59-0 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-o-tolyl- (7CI) (CA INDEX NAME)



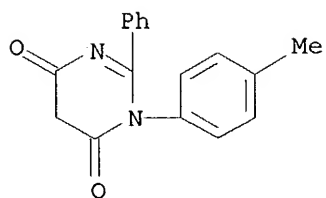
RN 94541-60-3 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-p-tolyl- (7CI) (CA INDEX NAME)



RN 94541-61-4 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl- (7CI) (CA INDEX NAME)



RN 94541-62-5 CAPLUS  
 CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl- (7CI) (CA INDEX NAME)



L18 ANSWER 152 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1962:66909 CAPLUS  
 DN 56:66909

OREF 56:12886e-i,12887a-g

TI Hydropyrimidines. I. 1,4,5,6-Tetrahydropyrimidine and its derivatives

AU Brown, D. J.; Evans, R. F.

CS Australian Natl. Univ., Canberra

SO Journal of the Chemical Society, Abstracts (1962) 527-33

CODEN: JCSAAZ; ISSN: 0590-9791

DT Journal

LA Unavailable

OS CASREACT 56:66909

AB 1,4,5,6-Tetrahydropyrimidine (I) and its salts were prepared and the properties of I were determined. Significant differences have been observed between the infrared spectra of its simple hydrogen halide salts and the complex metallo-chlorides. On the basis of the infrared and nuclear magnetic resonance spectra, it is concluded that CCl<sub>4</sub> solns. of 1,3,5-triazine contain less than 10% of an open-chain form. HCO<sub>2</sub>Et (41 cc.) added during 10 min. to 51 cc. CH<sub>2</sub>(CH<sub>2</sub>NH<sub>2</sub>)<sub>2</sub> (II), refluxed 15 hrs., and evaporated at 100°/20 mm., and a portion of the residue treated with picric acid gave the picrate (III) of HCONH(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> (IV), m. 137.5-39° (EtOH); the remainder of the crude IV heated 1.5 hrs. at 150 ± 5°/20 mm. in a slow stream of N and distilled yielded I, b0.5 80-2°, n<sub>20D</sub> 1.5166, n<sub>23.5D</sub> 1.5154, n<sub>25D</sub> 1.5149. I with 1-ClO<sub>4</sub>H<sub>7</sub>NCO yielded 1,3-bis(1-naphthylureido)propane, m. 236-7° (decomposition) (Me<sub>2</sub>CO). I with alc. HCl or cold N HCl gave I.HCl, m. 189-90° (MeOH-EtOAc). I in iso-PrOH titrated at 0° with 48% HBr gave I.HBr, deliquescent needles, m. 163-4.5° (iso-PrOH); I.HI m. 315° (decomposition); picrate m. 109-10° (EtOH). I.HCl and an equivalent amount of HgCl<sub>2</sub> in MeOH yielded I.HHgCl<sub>3</sub> (V), needles, m. 164-5.5°, which crystallized from H<sub>2</sub>O as V.H<sub>2</sub>O, m. 177.5-79°. I.HCl and AuCl<sub>3</sub> in MeOH gave I.HAuCl<sub>4</sub>, yellow plates, m. 266-7° (decomposition). I.HCl with hydrogen chloroplatinate gave I.HPtCl<sub>6</sub>, m. 230-1° (decomposition). II (1.5 cc.) added cautiously to 0.46 g. 1,3,5-triazine (VI) with cooling, kept 1 hr. at 20°, heated 2 hrs. on the steam bath, and distilled gave 61% I, b0.35 64°; picrate m. 279-80°. Formamidine acetate (VII) (11.5 g.) and 10.1 g. sodiodiformamide heated 1 hr. at 130°/1 mm. gave 1.6 g. VI, m. 76-9° (sublimed in vacuo). VII heated 1.25 hrs. at 170-80° gave 8% VI. HC(:NH)NH<sub>2</sub>.HCl and HgCl<sub>2</sub> (equivalent amts.) in MeOH gave HC(:NH)NH<sub>2</sub>HHgCl<sub>3</sub>.HgCl<sub>2</sub>, m. 210-13° (EtOH), which pyrolyzed 1 hr. at 180°/1 mm. yielded 6% VI. Pyrimidine (1.5 g.), 52 cc. 0.7N HCl, and 0.2 g. 10% Pd-C hydrogenated 4 hrs., filtered, and evaporated, and the residue treated with a concentrated solution of 5.1 g. HgCl<sub>2</sub> in MeOH gave I.HgCl<sub>2</sub>, m. 164-5.5°. 2,4-Dichloropyrimidine (7.44 g.) in 100 cc. H<sub>2</sub>O hydrogenated 9 hrs. over 0.9 g. 10% Pd-C gave 8 g. I.HCl. The reaction mixture from a similar run basified and extracted with Et<sub>2</sub>O, and the extract treated with (CO<sub>2</sub>H)<sub>2</sub> gave the oxalate of I, m. 146-8°; the mother liquor neutralized and extracted 3 days with Et<sub>2</sub>O gave the 2-OH derivative of I, m. 254-6° (iso-PrOH). VII (5.18 g.) added during 20 min. to 3.69 g. II, heated 1 hr. on the steam bath, and crystallized at -15° from iso-PrOH yielded 7.2 g. acetate of I, deliquescent prisms, m. 62-6°. I (0.08 g.) in 1.1 cc. H<sub>2</sub>O kept 2 min. at room temperature and treated with picric acid gave 72% picrate of I. I (0.33 g.) in 1.0 cc. H<sub>2</sub>O mixed after 15 min. with 0.9 g. picric acid in EtOH and cooled to 0° gave 1.0 g. III, m. 137.5-39° (MeOH). I.HCl (5 g.) in 2

*Same*

cc. H<sub>2</sub>O and 20 cc. Et<sub>2</sub>O treated at 0° with 4 g. KOH in 2 cc. H<sub>2</sub>O, and the Et<sub>2</sub>O layer distilled gave I; the aqueous layer treated with picric acid yielded the picrates of II and III. I.HBr (0.25 g.) in 5 cc. H<sub>2</sub>O refluxed 4 hrs. remained unchanged. I (1.3 g.) and 2.2 g. MeI in Et<sub>2</sub>O kept 1 hr., and the oily precipitate (2.95 g.) treated at -15° with iso-PrOH-EtOAc gave 1.4 g. unidentified material, m. 317-22° (decomposition), which gave a picrate, m. 115-17°. The mother liquor from the crude oil worked up, and the resulting oil (0.6 g.) treated with 0.9 g. picric acid in MeOH gave the picrate of the 1-Me derivative of I, m. 104-6°, which on alkaline hydrolysis gave MeNH(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub>, identified as the chloromercurate; the mother liquor evaporated, the residue refluxed 20 min. with 100 cc. N KOH and distilled, the distillate (50 cc.) mixed with 3.3 g. picric acid in MeOH and evaporated, the residue extracted with C<sub>6</sub>H<sub>6</sub>, and the insol. residue fractionally crystallized from EtOH-iso-PrOH gave 0.22 g. NH<sub>4</sub> picrate, m. 277-82° (decomposition), and 0.01 g. 1,3-bis(methylamino)propane picrate (VIII), m. 193-5°. The mother liquor from the unidentified material evaporated, the residue (1.1 g.) treated with 0.7 g. hot aqueous

HgCl<sub>2</sub>,

filtered from the precipitated HgI<sub>2</sub> and evaporated at 100°/20 mm., and the residue dissolved in 15 cc. MeOH containing 0.7 g. HgCl<sub>2</sub> precipitated 0.6 g.

I.HgCl<sub>2</sub>;

the mother liquor steam distilled 1 hr. with 140 cc. 2N KOH, and the distillate treated with 2 g. picric acid gave 0.03 g. VIII and 0.08 g. NH<sub>4</sub> picrate. I.HCl (0.85 g.) in dry CH<sub>2</sub>N<sub>2</sub>-Et<sub>2</sub>O kept 3 days and evaporated on the steam bath, and the residual oil (0.05 g.) refluxed 1 hr. with 18 cc. N NaOH, diluted with 50 cc. H<sub>2</sub>O, and distilled, and the distillate acidified with picric acid and evaporated gave 0.03 g. NH<sub>4</sub> picrate; the Et<sub>2</sub>O-insol. residue with HgCl<sub>2</sub>-MeOH gave only I.HgCl<sub>2</sub>. I (2 drops) added to cold 0.1N H<sub>2</sub>SO<sub>4</sub>, treated with dilute aqueous KMnO<sub>4</sub>, kept 20 min. at 20°, and heated 10 min. on the steam bath discharged the color; with pyrimidine the color was discharged in 5 min. at 20° under similar conditions. I (0.2 g.) 5 cc. 2N H<sub>2</sub>SO<sub>4</sub>, and 0.05 cc. PhNHC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H indicator solution at 0° treated with 5 cc. 0.1N K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> and kept at 20° did not change color during several days; a color change was observed with pyrimidine within 42 hrs. I (5 g.) and 1 g. 10% Pd-C heated to 190° under a slow stream of N, heated during 55 min. to 260°, cooled, and extracted with Et<sub>2</sub>O and then iso-PrOH, and the Et<sub>2</sub>O extract evaporated gave 0.1 g. bi(1,4,5,6-tetrahydro-2-pyrimidinyl) (IX), m. 160-70° (iso-PrOH); the iso-PrOH extract evaporated, and the residual gum sublimed at 200°/0.5 mm. yielded 0.85 g. impure IX; IX chloroplatinate, orange solid, m. 332-40° (MeOH-iso-PrOH). IX (0.013 g.) refluxed 2 hrs. with 11 cc. 0.25N NaOH and evaporated, and the distillate treated with picric acid yielded 0.04 g. picrate of II; the residue acidified to concentrated HCl and

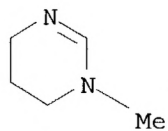
evaporated,

redissolved in H<sub>2</sub>O, and treated with CaCl<sub>2</sub> precipitated (CO<sub>2</sub>)<sub>2</sub>Ca. S (1.32 g.) and 1.73 g. I heated 1 hr. at 200 ± 10° and extracted with hot MeOH, the extract evaporated, and the residue (1.2 g.) sublimed at 180°/0.1 mm. gave pure 2-SH derivative of I, needles, m. 209-11° (EtOH). I.HCl (1.463M) (5.0 cc.) showed when added to 4.0 g. 0.998M KOH a pK<sub>a</sub> value of 13.0. The infrared absorption maximum of I and its derivs. are tabulated.

IT 2304-03-2, Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-  
(preparation of)

RN 2304-03-2 CAPLUS

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L18 ANSWER 153 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1962:46029 CAPLUS

DN 56:46029

OREF 56:8714d-i,8715a-c

TI Antihypertensive agents: derivatives of 2-imidazoline and 1,4,5,6-tetrahydropyrimidine

AU Faust, J. A.; Yee, L. S.; Sahyun, M.

CS Sahyun Labs., Santa Barbara, CA

SO Journal of Organic Chemistry (1961), 26, 4044-7  
CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA Unavailable

AB A series of 28 halobenzyl-2-imidazolines and 1,4,5,6-tetrahydropyrimidines was prepared and studied pharmacologically in the exptl. dog. Several of these compds. induced a pressor response while others exhibited strong adrenolytic and sympatholytic activity. One compound, 2-(o-chlorobenzyl)-2-imidazoline, was of particular interest for the management of essential hypertension in man. The general procedure was as follows. A mixture of 0.05 mole of the nitrile and 0.06 mole of the diamine monotosylate was heated at 200-10° until the evolution of NH<sub>3</sub> ceased (1-2 hrs.). The residue was dissolved in H<sub>2</sub>O or dilute HCl, filtered or extracted with

Et<sub>2</sub>O,

the aqueous solution made alkaline, and the solid bases collected, and recrystd.

usually from heptane. The oily or semisolid bases were extracted with Et<sub>2</sub>O, the solns. treated with dry HCl, and the salts crystallized from a suitable solvent. The following diamine tosylates were used: ethylenediamine mono-N-methylethylenediamine di-, 1,3-diaminopropane di-, N-methyldiaminopropane di-, 1,3-diamino-2-propanol di-, and 1,3-diaminobutane ditosylate. 1,3-Diaminobutane (26 g.) in 40 ml. iso-PrOH treated with 113 g. p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H in 80 ml. H<sub>2</sub>O, distilled to dryness, and the solid recrystd. gave the ditosylate, m. 190-1° (iso-PrOH). 1,3-Diamino-2-propanol ditosylate was prepared from the diaminopropanol as above, m. 272-3°. N-Methyl-1,3diaminopropane ditosylate was prepared from N-methyl-1,3diaminopropane as described above, m. 160-1°. An ethereal solution containing 26 g. cyanohydrin of o-chlorobenzaldehyde and 9.4 ml. alc. treated with excess HCl, the mixture left overnight at 25°, and the product isolated gave 20 g. Et p-chlorophenyl-α-hydroxyacetimidate-HCl (I), m. 130°. The following XC<sub>6</sub>H<sub>4</sub>CRR'CN were obtained (X, R, R', % yield, and b.p./mm. given): o-Cl, H, Me, 60, 79-81°/1.2; o-Cl, Me, Me, 71, 92-3°/1.2; o-Cl, H, Pr, 84, 103-4°/1.3; o-Cl, H, C<sub>5</sub>H<sub>4</sub>, 71, 129-30°/1; o-Cl, H, C<sub>6</sub>H<sub>11</sub>, 56, 153-5°/1.6; o-Cl, H, Ph, 79, 148-50°/0.9; o-Cl, H, CH<sub>2</sub>CH<sub>2</sub>NEt<sub>2</sub>, 80, 131-3°/0.8; o-I, H, H, 37, 119-21°/1; m-Br, H, C<sub>5</sub>H<sub>11</sub>, 29, 169-71°/2; p-Cl, H, Bu, 47, 126-9°/1.1; p-Cl, H, C<sub>6</sub>H<sub>11</sub>, 38, (m. 71-3°); 2,6-Cl<sub>2</sub>, H, H, 65, -(m. 75-6°). I(20g.) added portionwise to 7 g. N-methyl-1,3-diaminopropane in 100 ml. alc. at 5°, the mixture stirred 1 hr. at 5°, 1 hr. at 25°, vacuum distilled to an oil, the oil in dilute HCl clarified, made alkaline, and the base extracted with

Et<sub>2</sub>O

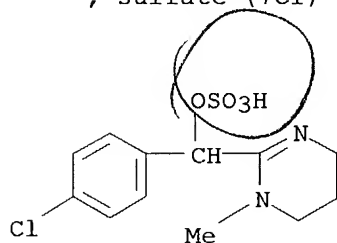
gave 11 g. 2-(p-chloro-α-hydroxybenzyl)-1-methyl-1,4,5,6-tetrahydropyrimidine, m. 69-70°; sulfate salt m. 183-4°. 2-(p-Chloro-α-hydroxybenzyl)-2imidazoline-HCl was similarly prepared using ethylenediamine. The following II were thus obtained (X, R, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, y, Z, m.p. given): o-F, H, H, H, H, 2, HCl, 194-5°; o-Cl, H, H, It, H, 2, HCl, 235-6°; o-Cl, H, H, H, H, 3, HCl, 214-5°; o-Cl, H, H, Me, H, 3, HCl, 209-10°; o-Cl, H, Me, H, H, 2, HCl,

222-3° (base m. 104-5°); o-Cl, H, H, Me, H, 2, HCl,  
 185-6° (base b1 122-4°); o-Cl, H, CH<sub>2</sub>CH<sub>2</sub>NEt<sub>2</sub>, H, H, 2, base,  
 57-8° (b1 164-7°); o-Cl, Me, Me, H, H, 2, HCl, 224-5°  
 (base m. 122-3°); o-Cl, Me, Me, Me, H, 2, (base), 62-4°;  
 o-Cl, OH, H, H, H, 2, HCl, 249-51°; o-Cl, OH, H, Me, H, 3, H<sub>2</sub>SO<sub>4</sub>,  
 183-4°; o-Cl, Me, Pr, H, H, 2, (base), 101-2°; o-Cl, H, H,  
 H, 5-OH, 3, HCl, 212-14° (base m. 157-8°); o-Cl, H, H, H,  
 4-Me, 3, HCl, 173-4°; o-Cl, H, Ph, H, H, 2, - (base),  
 163-5°; o-Cl, H, C<sub>6</sub>H<sub>11</sub>, H, H, 2, -- (base), 148.4-9.5°;  
 o-Cl, H, C<sub>5</sub>H<sub>9</sub>, H, H, 2, (base), 124-5°; o-Br, H, H, H, H, 2, HCl,  
 246-7°; o-I, H, H, H, H, 2, HCl, 272-3° (decomposition) (base m.  
 100-1°); m-Cl, H, H, H, H, 2, HCl, 181-2°; m-Br, H, H, H, H,  
 2, HCl, 180-1°; m-Br, H, C<sub>6</sub>H<sub>11</sub>, H, H, 2, - (base),  
 155.5-7.0°; p-Cl, H, C<sub>4</sub>H<sub>9</sub>, H, H, 2, HCl, 188-9° (base m.  
 90-1°); p-Cl, H, H, H, H, 2, HCl, 200-1° (base m.  
 148-50°); p-Cl, H, Ph, H, H, 2, -- (base), 132-4°; p-Cl, H,  
 C<sub>6</sub>H<sub>11</sub>, H, H, 2, -(base), 184-5.5°; 2,6-Cl<sub>2</sub>, H, H, H, H, 2, HCl,  
 257-8° (base m. 185-6°); 2,4-Cl<sub>2</sub>, H, H, H, H, 2, HCl,  
 197-8°.

IT **92905-24-3**, 2-Pyrimidinemethanol,  $\alpha$ -(p-chlorophenyl)-1,4,5,6-  
 tetrahydro-1-methyl-, sulfate **92905-25-4**, 2-Pyrimidinemethanol,  
 $\alpha$ -(p-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl-  
 (preparation of)

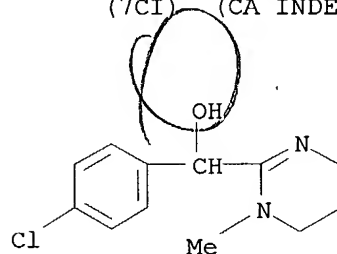
RN 92905-24-3 CAPLUS

CN 2-Pyrimidinemethanol,  $\alpha$ -(p-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl-  
 , sulfate (7CI) (CA INDEX NAME)



RN 92905-25-4 CAPLUS

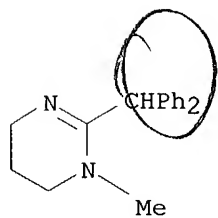
CN 2-Pyrimidinemethanol,  $\alpha$ -(p-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl-  
 (7CI) (CA INDEX NAME)



L18 ANSWER 154 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1961:87599 CAPLUS  
 DN 55:87599  
 OREF 55:16577h-i,16578a-f  
 TI 2-Diarylalkyl-3,4,5,6-tetrahydropyrimidines  
 IN Dornfeld, Clinton A.  
 PA G.D. Searle and Co.  
 DT Patent  
 LA Unavailable  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2946791		19600726	US	
AB	<p>Skinner and Wunz, CA 46, 2078a. The title compds. exhibited a combination of vasodilating and diuretic effects without adverse pressor-depressor response. Ph<sub>2</sub>CHC:N.(CH<sub>2</sub>)<sub>3</sub>.NH, m. 164° (EtCOME) [HCl salt m. 202°; nicotinate 126-7°; N-acetyl derivative; N-Me derivative (I) m. 79-80°; I.HBr m. 202-3°; I.HCl, hygroscopic; N-C<sub>8</sub>H<sub>17</sub> derivative HBr salt, no characterization], was prepared by refluxing Ph<sub>2</sub>CHCO<sub>2</sub>H 212, NH<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> 111, and xylene 435 parts 16 hrs. with concomitant azeotropic removal of H<sub>2</sub>O of reaction and working up. The following were similarly prepared from the appropriate acids and diamines in aromatic hydrocarbon solvents: a mixture of Ph<sub>2</sub>CHC:N.CH<sub>2</sub>.CH<sub>2</sub>.CHMe.NH and Ph<sub>2</sub>CHC:N.CHMe.CH<sub>2</sub>.CH<sub>2</sub>.NH, m. 134-5° (EtCOME), HCl salt, m. 191°; Ph<sub>2</sub>CHC:N.CH<sub>2</sub>.CHMe.CH<sub>2</sub>.NH, m. 165°, HCl salt, m. 202-3°; Ph<sub>2</sub>CHC:N.CH<sub>2</sub>.CMe<sub>2</sub>.CH<sub>2</sub>.NH, m. 147-9°, HCl salt, m. 260-1° (iso-PrOH), N-benzoyl derivative, no characterization; Ph<sub>2</sub>CHC:N.CH<sub>2</sub>.CEtMe.CH<sub>2</sub>.NH, b0.3 190°, m. 132-3°, HCl salt, m. 266-7°; Ph<sub>2</sub>CHC:N.CH<sub>2</sub>.C(Bu-tert)Me.CH<sub>2</sub>.NH, no characterization; Ph<sub>2</sub>CHC:N.CH<sub>2</sub>.CEt<sub>2</sub>.CH<sub>2</sub>.NH, b0.1 190°, m. 134-5°, HCl salt, m. 227-8°; Ph<sub>2</sub>CHC:N.CMe<sub>2</sub>.CH<sub>2</sub>.CHMe.NH, b0.1 140°, HCl salt, m. 238° (iso-PrOH); Ph<sub>2</sub>CHCH<sub>2</sub>C:N.(CH<sub>2</sub>)<sub>3</sub>.NH, m. 109-10° (PhMe), HCl salt, m. 177°; (p-MeC<sub>6</sub>H<sub>4</sub>)<sub>2</sub>CHC:N.CHBu.CH<sub>2</sub>.CHBu.NH, no characterization; 2,3,4-Me<sub>3</sub>C<sub>6</sub>H<sub>2</sub>CHPhC:N.(CH<sub>2</sub>)<sub>3</sub>.NH (and 2,4,6-Me<sub>3</sub>C<sub>6</sub>H<sub>2</sub>CHPhC:N.(CH<sub>2</sub>)<sub>3</sub>.NH), no characterization; p-EtC<sub>6</sub>H<sub>4</sub>CHPhCH<sub>2</sub>C:N.CHEt.CH<sub>2</sub>.CHEt.NH, no characterization; p-ClC<sub>6</sub>H<sub>4</sub>CHPhC:N.CH<sub>2</sub>.CMe<sub>2</sub>.CH<sub>2</sub>.NH, m. 110° (vacuum sublimation), HCl salt, m. 223-4°; p-FC<sub>6</sub>H<sub>4</sub>CHPhC:N.CH<sub>2</sub>.CMe<sub>2</sub>.CH<sub>2</sub>.NH, no characterization; p-BrC<sub>6</sub>H<sub>4</sub>CHPhC:N.CH<sub>2</sub>.CMe<sub>2</sub>.CH<sub>2</sub>.NH, no characterization; PhCH<sub>2</sub>CHPhC:N.(CH<sub>2</sub>)<sub>3</sub>.NH, m. 121-2° (EtCOME), HCl salt, no characterization; (PhCH<sub>2</sub>)<sub>2</sub>CHC:N.(CH<sub>2</sub>)<sub>3</sub>.NH, m. 157-8° (EtCOME), HCl salt, m. 246-7°; PhCH<sub>2</sub>CHPhC:N.CH<sub>2</sub>.CMe<sub>2</sub>.CH<sub>2</sub>.NH, m. 134-5° (EtOAc), HCl salt, m. 192°; PhCH<sub>2</sub>CH<sub>2</sub>CHPhC:N.CH<sub>2</sub>.CMe<sub>2</sub>.CH<sub>2</sub>.NH, m. 125-5.5°, HCl salt, m. 200-1°; PhCH<sub>2</sub>CPhMeCH<sub>2</sub>C:N.(CHMe)<sub>3</sub>.NH, no characterization; Ph(CH<sub>2</sub>)<sub>3</sub>CHPhC:N.CH<sub>2</sub>.CMe<sub>2</sub>.CH<sub>2</sub>.NH, m. 106° (vacuum sublimation), HCl salt, m. 205°; PhCH<sub>2</sub>CHPhCH<sub>2</sub>CH<sub>2</sub>C:N.CH<sub>2</sub>.CMe<sub>2</sub>.CH<sub>2</sub>.NH, no characterization.</p>				
IT	109693-83-6, Pyrimidine, 2-diphenylmethyl-1,4,5,6-tetrahydro-1-methyl- (and salts)				
RN	109693-83-6 CAPLUS				
CN	Pyrimidine, 2-diphenylmethyl-1,4,5,6-tetrahydro-1-methyl- (6CI) (CA INDEX NAME)				





L18 ANSWER 155 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1961:16659 CAPLUS

DN 55:16659

OREF 55:3252f-h

TI Stabilization of photographic silver halide emulsions against hardening

IN Damschroder, Rudolph E.; Cowden, Herbert B.

PA Eastman Kodak Co.

DT Patent

LA Unavailable

FAN.CNT 1

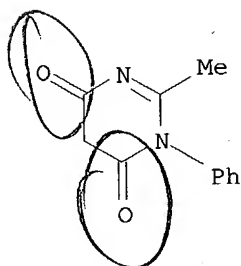
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2944899		19600712	US	
	GB 875581			GB	
	GB 875582			GB	

AB The tendency of unhardened photographic emulsions to become hardened during storage by action of constituents of the support or developing agent incorporated into the emulsion is alleviated by certain cyclic compds. containing active methylene groups. E.g. 5,5-dimethyl-1,3-cyclohexanedione (I), dicyclohexanone oxalyldihydrazone, 4-cyano-5-phenyl-1,3-cyclohexanedione, 5-phenyl-1,3-cyclohexanedione, or 3-dicyanomethylene-5,5-dimethylcyclohexanone. The preceding agents used in the emulsions of U.S. 2,716,059 (CA 50, 710b) containing self-coupling agents, such as 4-methoxy-1-naphthol, also prevent the formation of blue coloration and loss in sensitivity upon aging. Cyclohexanone oxime, 2,4-pentanedione dioxime, and 2,5-hexanedione dioxime do not affect the blue coloration but prevent emulsion hardening. The cyclic compds. also reduce the loss in effective coupling observed when some emulsions containing couplers, coated on paper stock, are aged for long periods. For example, samples of an Ag(Cl, Br) emulsion containing 3'-(benzoylaceto)-4'-methoxy-2-(2,4-di-tert-amylphenoxy)acetanilide were coated with 0, 1, 2, and 5 g. I per mole Ag halide. The d.-maximum losses in yellow dye d. on incubation for 6 days at 120°F. and 42% relative humidity were 9, 7.5, 1.8, and 0%, resp.

IT **7348-62-1**, 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl-  
 • (for hardening prevention of photographic emulsions)

RN 7348-62-1 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L18 ANSWER 156 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1961:13530 CAPLUS

DN 55:13530

OREF 55:2701f-i,2702a

TI Halogenated derivatives of tetrahydro-1-naphthyl cyclic amidines

IN Sahyun, Melville; Faust, John A.

PA Sahyun Laboratories

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2948724		19600809	US	

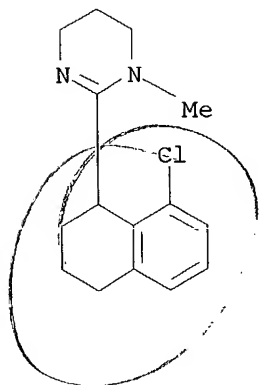
AB A method of preparation was given for halogen-substituted tetrahydro-1-naphthyl imidazolines and tetrahydropyrimidines. These compds. and their nontoxic water-soluble salts were useful for lowering blood pressure.

2-(8-Chloro-1,2,3,4-tetrahydro-1-naphthyl)imidazoline (I) was prepared by treating o-ClC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>Cl with KCN to obtain 88% o-ClC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CN (II), treating II with aqueous EtOH and H<sub>2</sub>SO<sub>4</sub> to obtain 91% o-ClC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CO<sub>2</sub>Et (III), treating III with NaOMe and CH<sub>2</sub>:CHCO<sub>2</sub>Me under N to obtain 77% o-ClC<sub>6</sub>H<sub>4</sub>CH(CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>Me)CO<sub>2</sub>Et, saponified in 90% yield, and the saponification product refluxed in Ac<sub>2</sub>O to obtain 87% o-ClC<sub>6</sub>H<sub>4</sub>CH.CO<sub>2</sub>.CO.CH<sub>2</sub>.CH<sub>2</sub> (IV). IV was treated with anhydrous AlCl<sub>3</sub> in PhNO<sub>2</sub> then N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O, KOH, and (CH<sub>2</sub>OH)<sub>2</sub>, the mixture distilled to obtain 44% 8-chloro-1,2,3,4-tetrahydro-1-naphthoic acid (V), m. 159-60°. V was converted to its nitrile in 74% yield by treating with SOCl<sub>2</sub> and NH<sub>4</sub>OH to obtain the amide, then refluxing in C<sub>6</sub>H<sub>6</sub> solution with SOCl<sub>2</sub>. The nitrile was then heated 2 hrs. at 200-10° with p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub>, the mixture cooled, treated to remove inorg. impurities, and recrystd. to obtain 65% I, m. 203-4° (EtOH); I.MeHSO<sub>4</sub> m. 251-3° (EtOH-Et<sub>2</sub>O). Also prepared were: 2-(8-chloro-1,2,3,4-tetrahydro-1-naphthyl)-1,4,5,6-tetrahydropyrimidine, m. 172-3° (C<sub>7</sub>H<sub>16</sub>, aqueous EtOH); 2-(8-chloro-1,2,3,4-tetrahydro-1-naphthyl)-1-methyl-1,4,5,6-tetrahydropyrimidine, m. 114-15° (C<sub>7</sub>H<sub>16</sub>); 2-(6-chloro-1,2,3,4-tetrahydro-1-naphthyl)imidazoline (VI), m. 163-73° (EtOH); VI. HCl, m. 228-9° (EtOH-Et<sub>2</sub>O); 2-(8-bromo-1,2,3,4-tetrahydro-1-naphthyl)imidazoline, m. 209-10° (EtOH).

IT **94064-59-2**, Pyrimidine, 2-(8-chloro-1,2,3,4-tetrahydro-1-naphthyl)-1,4,5,6-tetrahydro-1-methyl- (preparation of)

RN 94064-59-2 CAPLUS

CN Pyrimidine, 2-(8-chloro-1,2,3,4-tetrahydro-1-naphthyl)-1,4,5,6-tetrahydro-1-methyl- (6CI, 7CI) (CA INDEX NAME)



L18 ANSWER 157 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1960:101693 CAPLUS  
 DN 54:101693  
 OREF 54:19241c-i,19242a-g  
 TI Merocyanines and planar undissociated cyanines  
 IN Heseltine, Donald W.; Brooker, Leslie G. S.  
 PA Eastman Kodak Co.  
 DT Patent  
 LA Unavailable

FAN.CNT 1

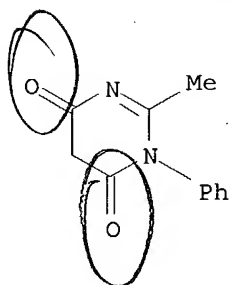
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2927026		19600301	US	
	DE 1082118			DE	
	GB 869521			GB	
	GB 869532			GB	
AB	A group of new merocyanine dyes and planar undissociated cyanine dyes has been prepared for use in photographic Ag halide emulsions. Thioacetamide, 7.5 g., and 9.4 g. chloroacetamide in 25 ml. EtOH were refluxed, allowed to stand at room temperature 1 hr., the precipitated NH <sub>4</sub> Cl removed, 3.35 g. 3-ethyl-2-ethylthiobenzothiazolium ethosulfate (I) and 1.4 ml. Et <sub>3</sub> N added. The mixture was heated, allowed to stand overnight, the crude dye precipitated				
by	<p>200 ml. H<sub>2</sub>O, and recrystd. twice from C<sub>6</sub>H<sub>6</sub> to give 20% 5-(3-ethyl-2(3H)-benzothiazolyldiene)-2-methylthiazolin-4-one (IA), m. 224-5° (decompose). Similarly, was prepared 10% 5-(3-ethyl-2(3H)-benzoxazolyldieneethylidene)-2-methylthiazolin-4-one, m. 230-1° (decompose), (MeOH, C<sub>6</sub>H<sub>6</sub>), and 9% 5-(3-ethyl-2(3H)-benzothiazolyldieneethylidene)-2-methylthiazolin-4-one (IB), m. 228-9° (decompose), (MeOH, C<sub>6</sub>H<sub>6</sub>). 2-Methylthiobenzoxazole, 4.95 g., was converted to its Me p-toluenesulfonate salt and 3.68 g. 7-methylimidazo [1,2-α]-pyridin-2(3H)-one-HCl (II), 8.4 ml. Et<sub>3</sub>N, and 30 ml. EtOH added, the mixture refluxed, allowed to stand overnight, and treated with 5 g. NaI in 100 ml. H<sub>2</sub>O and 100 ml. Et<sub>2</sub>O to give 1.45 g. 7-methyl-3-(3-methyl-2(3H)-benzoxazolyldiene)imidazo [1,2-α]-pyridin-2(3H)-one-HI, m. 211-13° (decompose), (MeOH). Likewise, II and 3-methyl-2-methylthiobenzothiazolium p-toluenesulfonate (IIA) gave 57% 7-methyl-3-(3-methyl-2(3H)-benzothiazolyldiene)imidazo [1,2-α] pyridin-2(3H)-one-HI, m. 192-3° (decompose), (MeOH); II and 2-(2-acetylanilinovinyl)-3-methylthiazolium iodide gave 84% 7-methyl-3-(3-methyl-2(3H)-thiazolinyldieneethylidene)imidazo [1,2-α] pyridin-2(3H)-one, m. 246-7° (decompose), (H<sub>2</sub>O); II and 2-(2-acetylanilinovinyl)-3-ethylbenzoxazolium iodide gave 71% 3-(3-ethyl-2(3H)-benzoxazolyldieneethylidene)-7-methylimidazo [1,2-α]-pyridin-2(3H)-one, m. 224-5° (aqueous MeOH); II and 2-(2-acetylanilinovinyl)-3-ethylbenzothiazolium iodide (III) gave 52% 3-(3-ethyl-2(3H)-benzothiazolyldieneethylidene)-7-methylimidazo [1,2-α] pyridin-2(3H)-one, m. 253-4° (decompose), (MeOH); 5,7-dimethyltetrazolo[a] pyrimidine (IV), and III gave 6% 7-[3-(3-ethyl-2(3H)-benzothiazolyldiene)-propenyl]-5-methyltetrazolo[a]pyrimidine, m. 190-1° (decompose), (EtOH); IV, and III gave 12% 5,7-bis[3-(3-ethyl-2(3H)-benzothiazolyldiene)propenyl] tetrazolo[a]pyrimidine, m. 205-6° (decompose), (pyridine-MeOH); 6-hydroxy-2-methyl-3-phenyl-4(3H)-pyrimidine (V) and 2-(2-acetylanilinovinyl)-1,3,3-trimethylpseudoindolium iodide gave 25% 1-phenyl-5-(1,3,3-trimethyl-2(3H)-indolyldieneethylidene)-2-[3-(1,3,3-trimethyl-2(3H)-indolyldiene)propenyl]4,6(1H, 5H)-pyrimidinedione, m. 275-7°.</p>				

(decompose), (pyridine-MeOH); V, and 2-(2-acetylanilinovinyl)-1-ethylquinolinium iodide yielded 80% 5-(1-ethyl-2(1H)-quinolylideneethylidene)-2-[3-(1-ethyl-2(1H)-quinolylidene)propenyl]-1-phenyl-4,6(1H, 5H)-pyrimidinedione-HI, m. 244-6° (decompose), (cresol-MeOH); IA and I gave 22% 5-(3-ethyl-2(3H)-benzothiazolylidene)-2-(3-ethyl-2(3H)-benzothiazolylideneethyl)thiazolin-4-one, m. >320° (pyridine-MeOH); IA and III gave 33% 5-(3-ethyl-2(3H)-benzothiazolylidene)-2-[3-(3-ethyl-2(3H)-benzothiazolylidene)-propenyl]thiazolin-4-one, m. 224-5° (decompose), (pyridine-aqueous MeOH); IB and I gave 28% 5-(3-ethyl-2(3H)-benzothiazolylideneethylidene)-2-(3-ethyl-2(3H)-benzothiazolylideneethyl)-2-thiazolin-4-one, m. 306-7° (decompose), (pyridine-MeOH); IB and III gave 46% 2-[3-(3-ethyl-2(3H)-benzothiazolylidene)propenyl]-5-(3-ethyl-2(3H)-benzothiazolylideneethylidene)thiazolin-4-one, m. 183-5° (pyridine-MeOH), decompose 250°; 3-ethyl-5-(3-ethyl-2(3H)-benzoxazolylideneethylidene)rhodanine, heated with Me p-toluenesulfonate 1 hr. and then treated with 5-(3-ethyl-2(3H)-benzoxazolylideneethylidene)-2-methylthiazolin-4-one gave 31% 3-ethyl-5-(3-ethyl-2(3H)-benzoxazolylideneethylidene)-2-[5-(3-ethyl-2(3H)-benzoxazolylideneethylidene)-4-oxo-2-thiazolinylmethylene]-4-thiazolidinone, m. 306-7° (decompose), (pyridine-MeOH); 7-methyl-3-(3-methyl-2(3H)-benzoxazolylidene)imidazo [1,2- $\alpha$ ] pyridin-2(3H)-one-HCl, 3-methyl-2-methylthiobenzoxazolium p-toluenesulfonate, and NaI gave 44% 3-(3-methyl-2(3H)-benzoxazolylidene)-7-(3-methyl-2(3H)-benzoxazolylideneethyl)imidazo [1,2- $\alpha$ ]pyridin-2(3H)-one-HI, m. 274-5° (decompose), (MeOH); 7-methyl-3-(3-methyl-2(3H)-benzothiazolylidene)imidazo-[1,2- $\alpha$ ]pyridin-2(3H)-one-HI and III gave 35% 7-[3-(3-ethyl-2(3H)-benzothiazolylidene)propenyl]-3-(3-methyl-2(3H)-benzothiazolylidene)imidazo-[1,2- $\alpha$ ]pyridin-2(3H)-one-HI, m. 228-9° (decompose), (MeOH); 7-methyl-3-(3-methyl-2(3H)-thiazolinylideneethylidene)imidazo [1,2- $\alpha$ ] pyridin-2(3H)-one, IIA, and NaI gave 34% 7-(3-methyl-2(3H)-benzothiazolylideneethyl)-3-(3-methyl-2(3H)-thiazolinylideneethylidene)imidazo [1,2- $\alpha$ ] pyridin-2(3H)-one-HI, m. 296-7° (decompose), (MeOH); 3-(3-ethyl-2(3H)-benzoxazolylideneethylidene)-7-methylimidazo [1,2- $\alpha$ ] pyridin-2(3H)-one and 2-(2-acetylanilinovinyl)-3-ethylbenzoxazolium iodide gave 12% 3-(3-ethyl-2(3H)-benzoxazolylideneethylidene)-7-[3-(3-ethyl-2(3H)-benzoxazolylidene)propenyl]imidazo[1,2- $\alpha$ ]pyridin-2(3H)-one-HI m. 240-1° (decompose); 3-(3-ethyl-2(3H)-benzothiazolylideneethylidene)-7-methyl-imidazo [1,2- $\alpha$ ]pyridin-2(3H)-one and IIA gave 73% 3-(3-ethyl-2(3H)-benzothiazolylideneethylidene)-7-(3-methyl-2(3H)-benzothiazolylideneethyl)imidazo [1,2- $\alpha$ ] pyridin-2(3H)-one, m. 285-7° (decompose). The preparation of the intermediates was carried out as follows: 5-Aminotetrazole, 21 g., 25 g. 2,4-pentanedione, and 5 ml. piperidine in 150 ml. EtOH, refluxed 16 hrs., concentrated to dryness, and extracted with hot ligroine (90-120°), gave 40% 5,7-dimethyltetrazolo[a]pyrimidine, m. 148-50° (ligroine). A cooled solution of NaOEt (from 13.8 g. Na) in EtOH was treated with 39.5 g. N-phenylacetamide-HCl in 125 ml. EtOH, the NaCl filtered, 32 g. Et malonate was added and the mixture refluxed 6 days. The resulting solid was dissolved in H<sub>2</sub>O and precipitated with HOAc to give 38% 6-hydroxy-2-methyl-3-phenyl-4-(3H)-pyrimidine, m. 173-6°. To 87 g. ClCH<sub>2</sub>CO<sub>2</sub>H dissolved in 900 ml. H<sub>2</sub>O and neutralized with Na<sub>2</sub>CO<sub>3</sub>, 2-amino-4-methylpyridine was added; the mixture was heated on a steam bath 4 hrs., then acidified with HCl, and evaporated to dryness to yield 47% 7-methylimidazo [1,2- $\alpha$ ] pyridin-2-(3H)-one-HCl, m. 298-9° (MeOH).

IT **7348-62-1**, 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl-  
(preparation of)

RN 7348-62-1 CAPLUS

CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA  
INDEX NAME)



L18 ANSWER 158 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1960:34348 CAPLUS  
 DN 54:34348  
 OREF 54:6768d-i,6769a-d  
 TI Amidines  
 IN Faust, John A.; Sahyun, Melville  
 PA Sahyun Laboratories  
 DT Patent  
 LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2919274		19591229	US	

AB Comps. of the structure [in which Y is H or halogen, X is halogen, R is H, lower alkyl or hydroxy, R' and R'' are H or lower alkyl and Z is -(CH<sub>2</sub>)<sub>2</sub> or 3 in which a H may be replaced by lower alkyl or OH] possess adrenolytic and sympatholytic properties. 2-Chlorobenzyl chloride (500 g.) in 600 ml. EtOH was added to a hot stirred solution of 260 g. KCN in 300 ml. water during 2 hrs. After refluxing 5 hrs., the mixture was filtered, most of the EtOH removed, taken up in CHCl<sub>3</sub> and the organic solution distilled

to

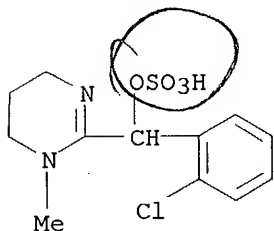
give 437 g. 2-chlorophenylacetonitrile (I), b<sub>2</sub> 106-11°. I (7.5 g.) and 16.2 g. ethylenediamine mono-p-toluenesulfonate (II) were heated at 200-20° until evolution of NH<sub>3</sub> ceased (1 hr.). The cooled mixture was dissolved in 75 ml. water, treated with C and made alkaline. The solid base (7.2 g.) was isolated and recrystd. from heptane to give 2-(o-chlorobenzyl)imidazoline, yellowish needles, m. 116-18°; HCl salt m. 235-6°. 2-Bromophenylacetonitrile gave 2-(o-bromobenzyl)imidazoline-HCl, yellow blades, m. 246-7°. 2,4-Dichlorophenylacetonitrile gave 2-(2,4-dichlorobenzyl)imidazoline-HCl, salmon-colored, m. 197-8°. 2-Iodobenzyl bromide was converted to 2-iodophenylacetonitrile, b<sub>1.3</sub>-1.5 112-18°, which on treatment with II gave 2-(o-iodobenzyl)imidazoline, m. 100-1°; HCl salt m. 272-3° (decomposition). 2-Fluorophenylacetonitrile gave 2-(o-fluorobenzyl)imidazoline, m. 90-1°, b<sub>1.5</sub> 131-3°; HCl salt m. 194-5°. 2,6-Dichlorophenylacetonitrile gave 2-(2,6-dichlorobenzyl)imidazoline, m. 185-6°; HCl salt m. 257-8°. I and 1,3-diaminopropane bis-p-toluenesulfonate gave 2-(o-chlorobenzyl)-1,4,5,6-tetrahydropyrimidine-HCl, m. 214-15°, H<sub>2</sub>O-soluble salmon-colored needles. N-Methyl-1,3-diaminopropane (III) (44 g.) in 100 ml. iso-PrOH was treated with 190 g. p-toluenesulfonic acid-H<sub>2</sub>O (IV) in 100 ml. H<sub>2</sub>O and the solution distilled to dryness. The residue was twice recrystd. from iso-PrOH to give 140 g. N-methyl-1,3-propanediamine bis-p-toluenesulfonate (V), m. 160-1°. I (7.6 g.), 13 g. V and 3 g. III gave 2.5 g. 2-(o-chlorobenzyl)-1-methyl-1,4,5,6-tetrahydropyrimidine-HCl, m. 209-10°. NaNH<sub>2</sub> (11.7 g.) in 100 ml. C<sub>6</sub>H<sub>6</sub> was cooled and treated with 45.6 g. I in 50 ml. C<sub>6</sub>H<sub>6</sub>. The mixture was stirred 1 hr. at room temperature, treated dropwise with 45.5 g. MeI in 50 ml. C<sub>6</sub>H<sub>6</sub>, refluxed 2 hrs., H<sub>2</sub>O added and the layers separated. The organic

solution was

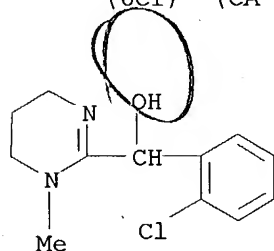
fractionated to give 30 g. α-(o-chlorophenyl)propionitrile (VI), b<sub>1.2</sub> 79-81°. VI and II gave 2-(o-chloro-α-methylbenzyl)imidazoline, m. 104-5°; HCl salt m. 219-20°. I and N-methylethylenediamine bis-p-toluenesulfonate (VII) and N-methylethylenediamine (VIII) gave 1-methyl-2-(o-chlorobenzyl)imidazoline, b<sub>1.1</sub> 122-4°; HCl salt m. 185-6°. Alkylation of VI with MeI gives 70% α-(o-chlorophenyl)isobutyronitrile (IX), b<sub>1.2</sub> 92-3°. IX (7.2 g.), 8.4

g. VII and 1.48 g. VIII gave 1.9 g. 1-methyl-2-(o-chloro- $\alpha,\alpha$ -dimethylbenzyl)imidazoline, b1.4 134-5°, m. 62-4°. IX and II gave 2-(o-chloro- $\alpha,\alpha$ -dimethylbenzyl)imidazoline, m. 122-3°; HCl salt m. 224-5°. o-Chloromandelonitrile (26 g.) and 9.4 ml. EtOH in Et2O containing excess HCl was allowed to stand overnight and gave 20 g. Et o-chloromandelimidate-HCl (X), m. 130° (decomposition). III (7 g.) in 100 ml. EtOH was treated at 5° with 20 g. X. After being stirred 1 hr. at 5° and 1 hr. at 25°, the mixture became homogeneous; EtOH was removed, the residue was acidified with ethanolic HCl, distilled to an oily residue which was dissolved in H2O, made alkaline, extracted with Et2O, and evaporated to give 2-(o-chloro- $\alpha$ -hydroxybenzyl)-1-methyl-1,4,5,6-tetrahydropyrimidine, m. 69-70°; sulfate m. 183-4°. Alkylation of VI with PrBr gave 87% o-chloro- $\alpha$ -methyl- $\alpha$ -propylphenylacetonitrile (XI), b1.3 103-4°. XI (7 g.) and 10.5 g. II gave 2 g. 2-(o-chloro- $\alpha$ -methyl- $\alpha$ -propylbenzyl)imidazoline, m. 101-2°. 1,3-Diamino-2-propanol (XII) (45 g.) and 190 g. IV gave 167 g. 1,3-diamino-2-propanol bis-p-toluenesulfonate (XIII), m. 272-3°. I (7.6 g.), 11.8 g. XIII and 2.4 g. XII gave 11 g. 2-(o-chlorobenzyl)-5-hydroxy-1,4,5,6-tetrahydropyrimidine p-toluenesulfonate salt, m. 168-9°; free base m. 157-8°; HCl salt m. 212-14°. 1,3-Diaminobutane (XIV) (26 g.) and 114 g. IV gave 108 g. 1,3-diaminobutane bis-p-toluenesulfonate (XV), m. 190-1°. I (5 g.), 7.4 g. XV and 1.5 g. XIV gave 2-(o-chlorobenzyl)-4-methyl-1,4,5,6-tetrahydropyrimidine-HCl, m. 173-4°. Pharmacol. data were given.

IT **100388-35-0**, 2-Pyrimidinemethanol,  $\alpha$ -(o-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl-, sulfate **100388-36-1**, 2-Pyrimidinemethanol,  $\alpha$ -(o-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl- (preparation of)  
 RN 100388-35-0 CAPLUS  
 CN 2-Pyrimidinemethanol,  $\alpha$ -(o-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl-, sulfate (6CI) (CA INDEX NAME)



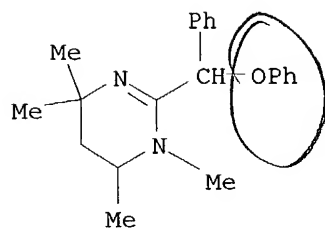
RN 100388-36-1 CAPLUS  
 CN 2-Pyrimidinemethanol,  $\alpha$ -(o-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl- (6CI) (CA INDEX NAME)





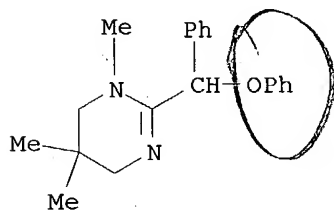
L18 ANSWER 159 OF 159 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1959:111946 CAPLUS  
 DN 53:111946  
 OREF 53:20103b-f  
 TI Symmetrical secondary aralkyl-disubstituted piperazines  
 PA Nordmark-Werke G. m. b. H.  
 DT Patent  
 LA Unavailable  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 813473		19590521	GB	
AB	<p>Piperazines symmetrically disubstituted in the 1- and 4-positions by secondary aralkyl radicals, <math>\text{Ph}(\text{CH}_2)_n\text{CHR}</math>, where R = a 1-8 C atom alkyl radical and <math>n = 0</math> to 10, may be prepared by: (1) treating the corresponding symmetrically-substituted ethylenediamine with an alkylene dihalide in the presence of an acid-binding agent to give ring closure; (2) treating piperazine (I) with an aralkyl halide in the presence of a condensing agent; (3) catalytically hydrogenating I and a ketone, <math>\text{Ph}(\text{CH}_2)_n\text{COR}</math>, at elevated pressures at 60-180°; (4) heating a primary amine, <math>\text{Ph}(\text{CH}_2)_n\text{CHRNH}_2</math>, with an alkylene dihalide to 160-180° in aqueous solution or in organic solvent using an acid-binding agent. Thus, 34 g. <math>\text{PhCH}_2\text{CHMeNH}_2</math> and 47 g. <math>\text{BrCH}_2\text{CH}_2\text{Br}</math> (II) was heated in an oil bath for 1 hr. at 160° and then for 8 hrs. at 180°. The dark product was dissolved in 250 cc. <math>\text{H}_2\text{O}</math>, made alkaline with NaOH solution, and the oil that separated was extracted with <math>\text{CH}_2\text{Cl}_2</math>, dried, and the <math>\text{CH}_2\text{Cl}_2</math> evaporated. The residue was dissolved in MeOH and neutralized with 33% HBr. The white precipitate filtered off, extracted by boiling 2-3 times with MeOH, and recrystd. from <math>\text{H}_2\text{O}</math> gave 1,4-bis(<math>\alpha</math>-methylphenethyl)piperazine-2HBr (III), decompose above 320°. The corresponding dihydrochloride m. 296-7°. III was also prepared from II and bis(<math>\alpha</math>-methylphenethyl)ethylenediamine-2HBr in the presence of NaOH. Bis(<math>\alpha</math>-methyl-<math>\gamma</math>-phenylpropyl)piperazine-2HBr m. 312-14°, was prepared from II and <math>\text{Ph}(\text{CH}_2)_2\text{CHMeNH}_2</math>, the bis(<math>\alpha</math>-methylbenzyl)piperazine-2HBr, m. above 330°, from <math>\text{PhCHMeBr}</math> and piperazine hexahydrate, the N,N'-bis(5-phenyl-1-methylpentyl)piperazine hydrobromide, m. 279-80°, from II and <math>\text{Ph}(\text{CH}_2)_4\text{CHMeNH}_2</math>. N,N'-Bis[<math>\alpha</math>-(n-octyl)benzyl]ethylenediamine, yellow, b0.01 196-210°, prepared from II and n-C<sub>8</sub>H<sub>17</sub>CHPhNH<sub>2</sub> was further treated with II to give N,N'-bis[<math>\alpha</math>-(n-octyl)benzyl]piperazine-2HBr m. 203.5-4.5°. These compds. and their salts have therapeutic use as medullary depressants, narcosis potentiators, and dilators of cortical vessels.</p>				
IT	<p><b>112325-53-8</b>, Pyrimidine, 1,4,5,6-tetrahydro-1,4,4,6-tetramethyl-2-<math>\alpha</math>-phenoxybenzyl-, hydrobromide <b>114721-96-9</b>, Pyrimidine, 1,4,5,6-tetrahydro-1,5,5-trimethyl-2-<math>\alpha</math>-phenoxybenzyl-, hydrobromide (preparation of)</p>				
RN	112325-53-8 CAPLUS				
CN	Pyrimidine, 1,4,5,6-tetrahydro-1,4,4,6-tetramethyl-2- $\alpha$ -phenoxybenzyl-, hydrobromide (6CI) (CA INDEX NAME)				



● HBr

RN 114721-96-9 CAPLUS  
 CN Pyrimidine, 1,4,5,6-tetrahydro-1,5,5-trimethyl-2-α-phenoxybenzyl-,  
 hydrobromide (6CI) (CA INDEX NAME)



● HBr

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L9      SCREEN 2016 OR 2026 OR 1841 OR 2039 OR 2040 OR 2045 OR 20
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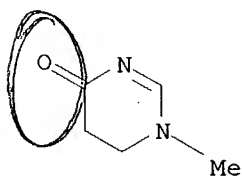
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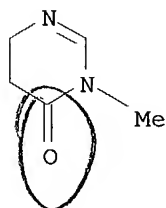
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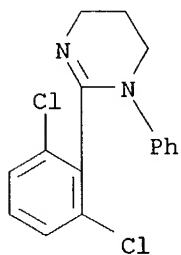
L19 ANSWER 1 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA65:20121f CAOLD  
TI hydroypyrimidines - (V) isomeric 2- and 4-oxodihydropyrimidines  
AU Skaric, Vinko; Gaspert, B.; Jerkunica, J. M.  
IT 10167-03-0 10167-05-2  
RN 10167-03-0 CAOLD  
CN 4(1H)-Pyrimidinone, 5,6-dihydro-1-methyl- (7CI, 8CI) (CA INDEX NAME)



RN 10167-05-2 CAOLD  
CN 4(3H)-Pyrimidinone, 5,6-dihydro-3-methyl- (7CI, 8CI) (CA INDEX NAME)



L19 ANSWER 2 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA64:13313h CAOLD  
TI effects of rate of formation of 2,6-dichlorobenzonitrile on its toxicity  
to plants  
AU Milborrow, B. V.  
IT **3797-96-4**  
RN 3797-96-4 CAOLD  
CN Pyrimidine, 2-(2,6-dichlorophenyl)-1,4,5,6-tetrahydro-1-phenyl-,  
monohydrobromide (9CI) (CA INDEX NAME)



*Same as # 140*

● HBr

(103)

L19 ANSWER 3 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
 AN CA64:8192c CAOLD  
 TI anthelmintic 2-alkylthiophenes  
 PA Pfizer Corp.  
 DT Patent

PATENT NO.	KIND	DATE
BE 658987		
GB 1045838		
5671-30-7	5671-33-0	5671-52-3
5685-90-5	5722-14-5	5822-06-0
96773-30-7		

PI BE 658987  
 GB 1045838

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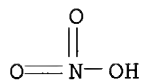
RN 5671-30-7 CAOLD

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-,  
 mononitrate (8CI, 9CI) (CA INDEX NAME)

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CRN 7697-37-2

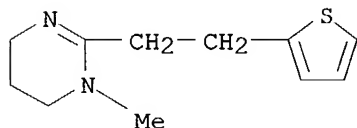
CMF H N O3



CM 2

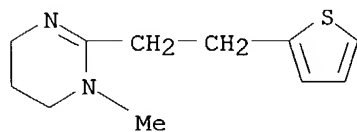
CRN 5685-90-5

CMF C11 H16 N2 S



RN 5671-33-0 CAOLD

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-,  
 monohydrochloride (8CI, 9CI) (CA INDEX NAME)



● HCl

RN 5671-52-3 CAOLD

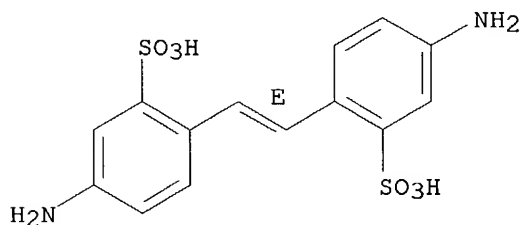
CN 2,2'-Stilbenedisulfonic acid, 4,4'-diamino-, compd. with  
1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]pyrimidine (1:2), (Z)-  
(8CI) (CA INDEX NAME)

CM 1

CRN 28096-93-7

CMF C14 H14 N2 O6 S2

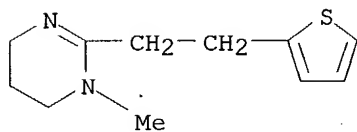
Double bond geometry as shown.



CM 2

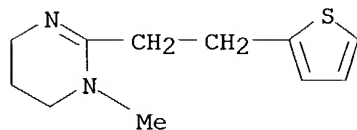
CRN 5685-90-5

CMF C11 H16 N2 S



RN 5685-90-5 CAOLD

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]- (8CI, 9CI)  
(CA INDEX NAME)



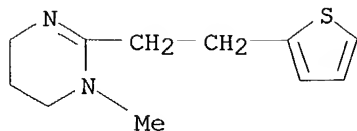
RN 5722-14-5 CAOLD

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-,  
mono(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)

CM 1

CRN 5685-90-5

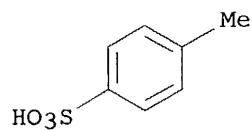
CMF C11 H16 N2 S



CM 2

CRN 104-15-4

CMF C7 H8 O3 S



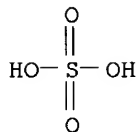
RN 5822-06-0 CAOLD

CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]-, sulfate (1:1) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9

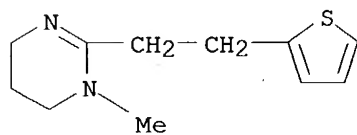
CMF H2 O4 S



CM 2

CRN 5685-90-5

CMF C11 H16 N2 S



RN 96773-30-7 CAOLD

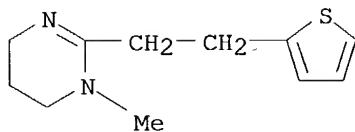
CN 2,2'-Stilbenedisulfonic acid, 4,4'-diamino-, compd. with 1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)ethyl]pyrimidine (7CI) (CA INDEX NAME)



CM 1

CRN 5685-90-5

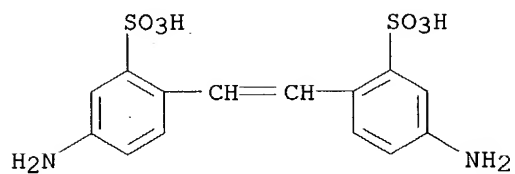
CMF C11 H16 N2 S



CM 2

CRN 81-11-8

CMF C14 H14 N2 O6 S2



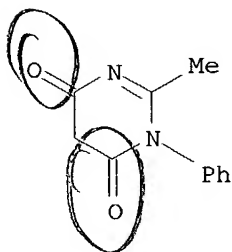
L19 ANSWER 4 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA64:3747d CAOLD  
TI dyes (merocyanine and planar undissocd. cyanine)  
PA Eastman Kodak Co.  
DT Patent  
TI merocyanine and planar undissocd. cyanine dyes  
AU Heseltine, Donald W.; Brooker, L. G. S.  
DT Patent

	PATENT NO.	KIND	DATE
PI	US 3213089		1965

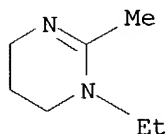
IT **7348-62-1**

RN 7348-62-1 CAOLD

CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

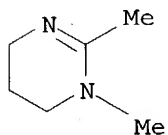


L19 ANSWER 5 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA64:2085b CAOLD  
TI reactions of  $\beta$ - and  $\gamma$ -oxocarboxylic esters and ethylenediamines  
AU Baganz, Horst; Rabe, S.  
IT 4271-97-0  
RN 4271-97-0 CAOLD  
CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA  
INDEX NAME)

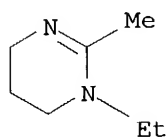


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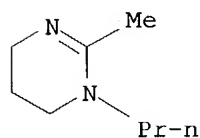
L19 ANSWER 6 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA63:17891b CAOLD  
TI hydrogenation of amino nitriles - (VIII) catalytic hydrogenation of  
N-alkyl-N-(2-cyanoethyl)acetamides  
AU Mikolajewska, Halina; Kotelko, A.  
IT 4271-96-9 4271-97-0 4271-98-1  
4335-66-4  
RN 4271-96-9 CAOLD  
CN Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl- (7CI, 8CI, 9CI) (CA INDEX  
NAME)



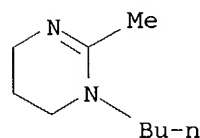
RN 4271-97-0 CAOLD  
CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA  
INDEX NAME)



RN 4271-98-1 CAOLD  
CN Pyrimidine, 1,4,5,6-tetrahydro-2-methyl-1-propyl- (7CI, 8CI) (CA INDEX  
NAME)



RN 4335-66-4 CAOLD  
CN Pyrimidine, 1-butyl-1,4,5,6-tetrahydro-2-methyl- (7CI, 8CI, 9CI) (CA  
INDEX NAME)



L19 ANSWER 7 OF 32 CAOLD COPYRIGHT 2004 ACS on STN

AN CA63:611a CAOLD

TI 2,1,3-benzothiadiazoline 2,2-dioxides

AU Carson, John R.

PA McNeil Laboratories, Inc.

DT Patent

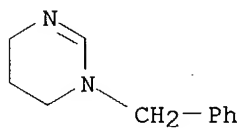
PATENT NO.	KIND	DATE
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PI	US 3177221	1965
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IT **1602-94-4** **1615-04-9**

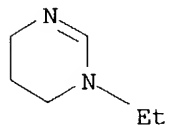
RN 1602-94-4 CAOLD

CN Pyrimidine, 1,4,5,6-tetrahydro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

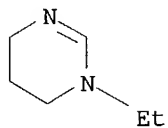


RN 1615-04-9 CAOLD

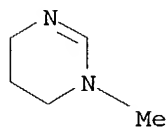
CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro- (7CI, 8CI) (CA INDEX NAME)



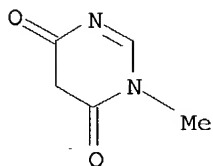
L19 ANSWER 8 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA62:16240b CAOLD  
TI N,N'-disubstituted formamidines  
AU Jentzsch, Wolfgang; Seefelder, M.  
IT 1615-04-9 2304-03-2  
RN 1615-04-9 CAOLD  
CN Pyrimidine, 1-ethyl-1,4,5,6-tetrahydro- (7CI, 8CI) (CA INDEX NAME)



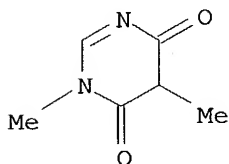
RN 2304-03-2 CAOLD  
CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L19 ANSWER 9 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA61:15961a CAOLD  
TI structure of 4,6-dihydroxypyrimidine and its 5-methyl analog  
AU Kheifets, G. M.; Khromov-Borisov, N. V.  
IT 24391-38-6 89532-82-1  
RN 24391-38-6 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 89532-82-1 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1,5-dimethyl- (7CI) (CA INDEX NAME)



L19 ANSWER 10 OF 32 CAOLD COPYRIGHT 2004 ACS on STN

AN CA61:11876a CAOLD

TI pyrimidines - (VI) dominant tautomer in aqueous 4-hydroxy-6-mercaptopyrimidine

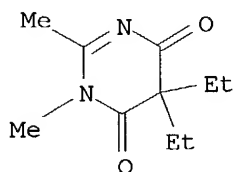
AU Brown, Desmond J.; Teitei, T.

IT 91010-99-0 91800-38-3 91800-39-4

94032-62-9

RN 91010-99-0 CAOLD

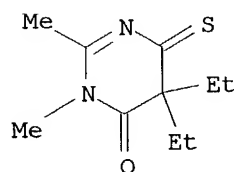
CN 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl- (7CI) (CA INDEX NAME)



8

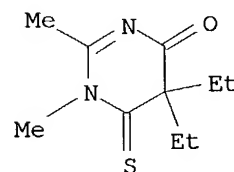
RN 91800-38-3 CAOLD

CN 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl-4-thio- (7CI) (CA INDEX NAME)



RN 91800-39-4 CAOLD

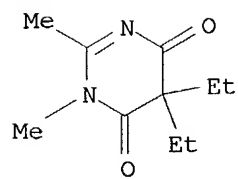
CN 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl-6-thio- (7CI) (CA INDEX NAME)



RN 94032-62-9 CAOLD

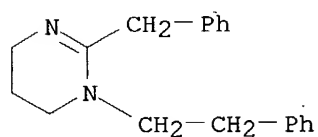
CN 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl-, hydriodide (7CI) (CA INDEX NAME)



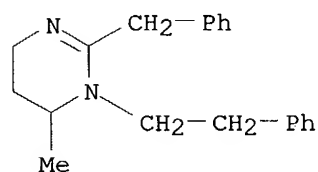


● HI

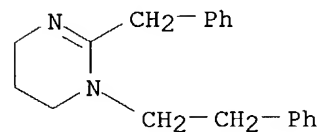
L19 ANSWER 11 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
 AN CA61:4162c CAOLD  
 TI tetrahydropyrimidines as antihistamines and bronchodilators  
 PA Ayerst, McKenna & Harrison, Ltd.  
 DT Patent  
 PATENT NO.      KIND      DATE  
 -----  
 PI GB 952802  
 CA 706890  
 IT 94308-50-6 94679-12-6 98823-26-8  
 RN 94308-50-6 CAOLD  
 CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-1-phenethyl- (7CI) (CA INDEX NAME)



RN 94679-12-6 CAOLD  
 CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-6-methyl-1-phenethyl- (7CI) (CA INDEX NAME)

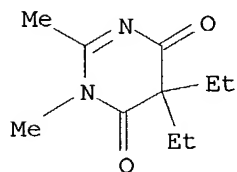


RN 98823-26-8 CAOLD  
 CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-1-phenethyl-, hydrobromide (7CI) (CA INDEX NAME)

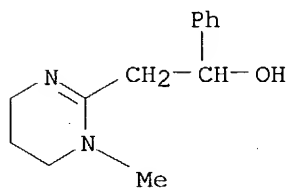


● HBr

L19 ANSWER 12 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA61:2627e CAOLD  
TI pyrimidines - (VII) fine structure of 4,6-dihydroxypyrimidine  
AU Brown, Desmond J.; Teitei, T.  
IT **91010-99-0**  
RN 91010-99-0 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 5,5-diethyl-1,2-dimethyl- (7CI) (CA INDEX NAME)



L19 ANSWER 13 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA61:1862h CAOLD  
TI derivs. of 2-(2-pyrimidinyl)acetophenone  
AU Ebetino, Frank F.; Amstutz, E. D.  
TI synthesis of phenobarbital-5-14C  
AU Benakis, Achille  
IT **26133-47-1**  
RN 26133-47-1 CAOLD  
CN 2-Pyrimidineethanol, 1,4,5,6-tetrahydro-1-methyl- $\alpha$ -phenyl-,  
monohydrochloride (8CI) (CA INDEX NAME)



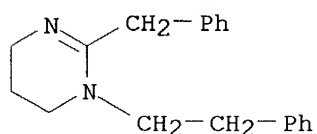
● HCl

*Handwritten mark resembling a stylized 'b' or a signature.*

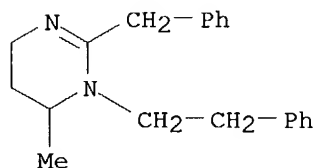
L19 ANSWER 14 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
 AN CA60:14517h CAOLD  
 TI 2-benzyl-3-phenethyltetrahydropyrimidines  
 AU Langis, Andre L.; Pilkington, C. A.  
 PA American Home Products Corp.  
 DT Patent  

PATENT NO.	KIND	DATE
US 3126381		1964
FR 1403616		

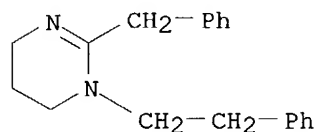
 IT 94308-50-6 94679-12-6 98823-26-8  
 99098-61-0  
 RN 94308-50-6 CAOLD  
 CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-1-phenethyl- (7CI) (CA INDEX NAME)



RN 94679-12-6 CAOLD  
 CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-6-methyl-1-phenethyl- (7CI) (CA INDEX NAME)

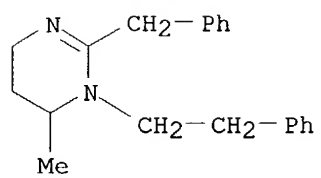


RN 98823-26-8 CAOLD  
 CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-1-phenethyl-, hydrobromide (7CI) (CA INDEX NAME)



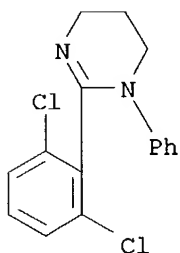
● HBr

RN 99098-61-0 CAOLD  
 CN Pyrimidine, 2-benzyl-1,4,5,6-tetrahydro-6-methyl-1-phenethyl-, hydrochloride (7CI) (CA INDEX NAME)



● HCl

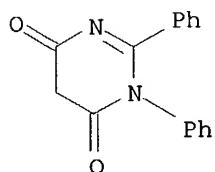
L19 ANSWER 15 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA60:9299c CAOLD  
TI thiazolines, oxazines, thiazines, benzimidazoles, and other heterocyclic  
compds.  
PA "Shell" Research Ltd.  
DT Patent  
PATENT NO. KIND DATE  
-----  
PI BE 623714  
GB 1013441  
NL 284415  
US 3244703 1966  
IT **3797-96-4**  
RN 3797-96-4 CAOLD  
CN Pyrimidine, 2-(2,6-dichlorophenyl)-1,4,5,6-tetrahydro-1-phenyl-,  
monohydrobromide (9CI) (CA INDEX NAME)



● HBr

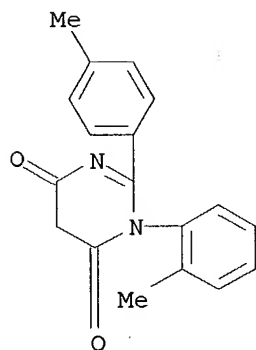
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L19 ANSWER 16 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA60:9276g CAOLD  
TI synthesis of pyridazino[3,2-b]quinazol-10-ones  
AU Beyer, Hans; Voelker, C. E.  
IT 94205-66-0 94209-30-0 94209-31-1  
94541-60-3 94541-61-4 94541-62-5  
RN 94205-66-0 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- (7CI, 9CI) (CA INDEX NAME)

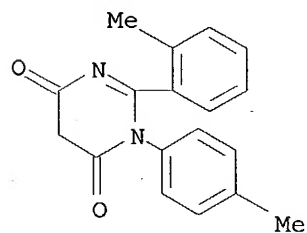


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RN 94209-30-0 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl- (7CI) (CA INDEX NAME)

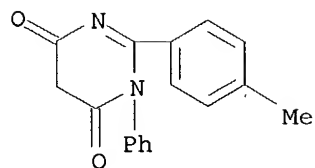


RN 94209-31-1 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl- (7CI) (CA INDEX NAME)



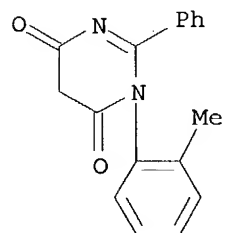
RN 94541-60-3 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-p-tolyl- (7CI) (CA INDEX NAME)





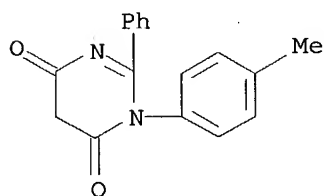
RN 94541-61-4 CAOLD

CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl- (7CI) (CA INDEX NAME)

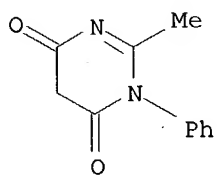


RN 94541-62-5 CAOLD

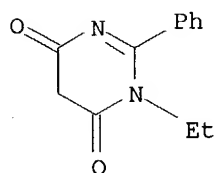
CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl- (7CI) (CA INDEX NAME)



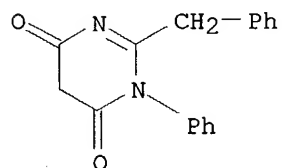
L19 ANSWER 17 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA60:9276d CAOLD  
TI tautomerism of 1,2-disubstituted 4,6-dioxotetrahydropyrimidines  
AU Dashkevich, L. B.; Siraya, V. M.  
IT 7348-62-1 91392-65-3 94541-58-9  
RN 7348-62-1 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 91392-65-3 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1-ethyl-2-phenyl- (7CI) (CA INDEX NAME)



RN 94541-58-9 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 2-benzyl-1-phenyl- (7CI) (CA INDEX NAME)



L19 ANSWER 18 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
 AN CA59:11524h CAOLD  
 TI 1,2-disubstituted 4,6-dioxotetrahydropyrimidines  
 AU Dashkevich, L. B.; Siraya, V. M.  
 DT Patent

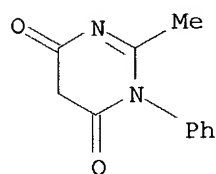
PATENT NO.	KIND	DATE
SU 152465		
7348-62-1	91392-65-3	94205-66-0
94209-29-7	94209-30-0	94209-31-1
94541-58-9	94541-59-0	94541-60-3
94541-61-4	94541-62-5	

PI SU 152465

IT 7348-62-1 91392-65-3 94205-66-0  
 94209-29-7 94209-30-0 94209-31-1  
 94541-58-9 94541-59-0 94541-60-3  
 94541-61-4 94541-62-5

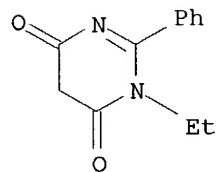
RN 7348-62-1 CAOLD

CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



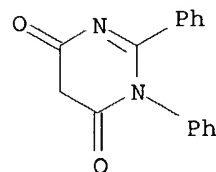
RN 91392-65-3 CAOLD

CN 4,6(1H,5H)-Pyrimidinedione, 1-ethyl-2-phenyl- (7CI) (CA INDEX NAME)



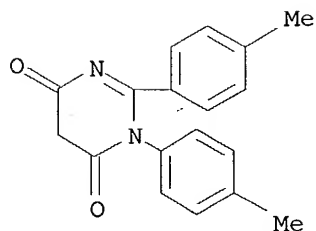
RN 94205-66-0 CAOLD

CN 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- (7CI, 9CI) (CA INDEX NAME)

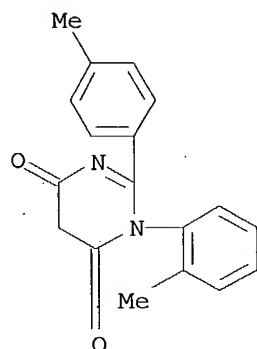


RN 94209-29-7 CAOLD

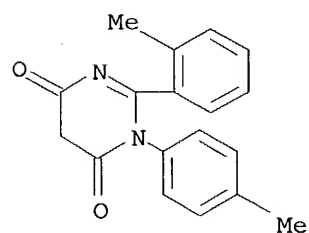
CN 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl- (7CI) (CA INDEX NAME)



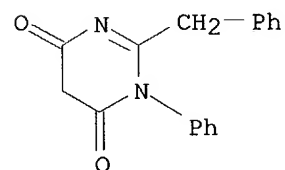
RN 94209-30-0 CAOLD  
 CN 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl- (7CI) (CA INDEX NAME)



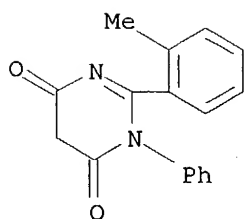
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 CN 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl- (7CI) (CA INDEX NAME)



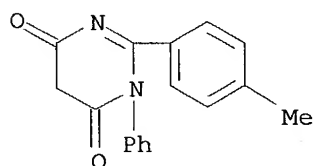
RN 94541-58-9 CAOLD  
 CN 4,6(1H,5H)-Pyrimidinedione, 2-benzyl-1-phenyl- (7CI) (CA INDEX NAME)



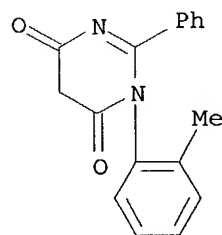
RN 94541-59-0 CAOLD  
 CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-o-tolyl- (7CI) (CA INDEX NAME)



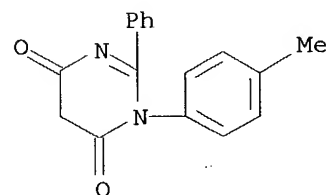
RN 94541-60-3 CAOLD  
 CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-p-tolyl- (7CI) (CA INDEX NAME)



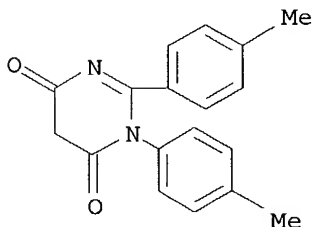
RN 94541-61-4 CAOLD  
 CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl- (7CI) (CA INDEX NAME)



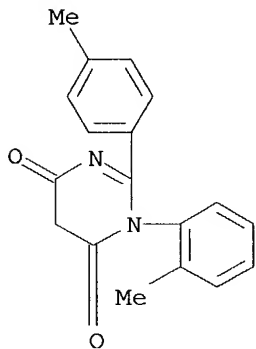
RN 94541-62-5 CAOLD  
 CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl- (7CI) (CA INDEX NAME)



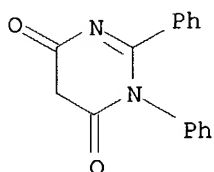
L19 ANSWER 19 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA58:7946d CAOLD  
TI heterocyclic system containing P and N  
AU Derkach, G. I.  
IT **94209-29-7 94209-30-0**  
RN 94209-29-7 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl- (7CI) (CA INDEX NAME)



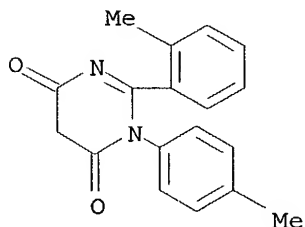
RN 94209-30-0 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl- (7CI) (CA INDEX NAME)



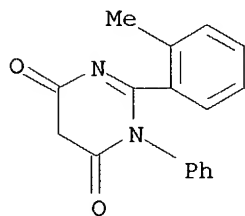
L19 ANSWER 20 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA58:7946c CAOLD  
TI C suboxide and some of its reactions - (XII) reaction of C suboxide with  
N-aryl aromatic amidines  
AU Dashkevich, L. B.  
IT 94205-66-0 94209-31-1 94541-59-0  
94541-60-3 94541-61-4 94541-62-5  
RN 94205-66-0 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- (7CI, 9CI) (CA INDEX NAME)



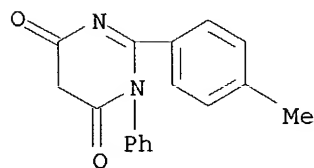
RN 94209-31-1 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl- (7CI) (CA INDEX NAME)



RN 94541-59-0 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-o-tolyl- (7CI) (CA INDEX NAME)

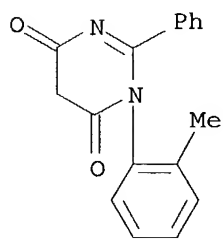


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CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-p-tolyl- (7CI) (CA INDEX NAME)



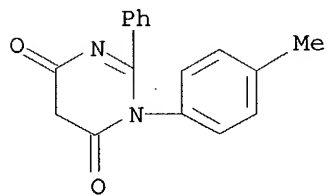
RN 94541-61-4 CAOLD

CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl- (7CI) (CA INDEX NAME)



RN 94541-62-5 CAOLD

CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl- (7CI) (CA INDEX NAME)





L19 ANSWER 21 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA58:2459a CAOLD  
TI tetrahydro-1-naphthyl cyclic amidines, halogenated derivs. of  
PA Pfizer, Chas., & Co., Inc.  
DT Patent

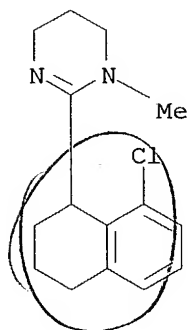
PATENT NO.	KIND	DATE
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PI	GB 877306	
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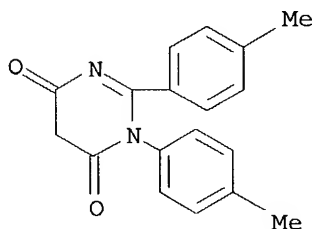
IT	94064-59-2	
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RN	94064-59-2	CAOLD
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CN	Pyrimidine, 2-(8-chloro-1,2,3,4-tetrahydro-1-naphthyl)-1,4,5,6-tetrahydro-1-methyl- (6CI, 7CI)	(CA INDEX NAME)
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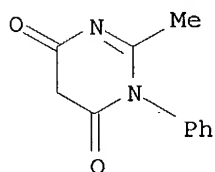


L19 ANSWER 22 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA57:15106c CAOLD  
TI potential purine antagonists - (XXXIV) synthesis of 3-methylguanine and  
structure and chemical reactivity of certain 3-methylpurines  
AU Townsend, Leroy B.; Robins, R. K.  
IT **94209-29-7**  
RN 94209-29-7 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1,2-di-p-tolyl- (7CI) (CA INDEX NAME)

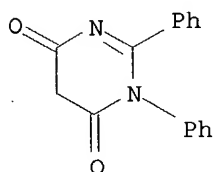


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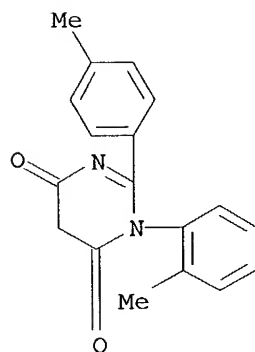
L19 ANSWER 23 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA57:15106a CAOLD  
TI preparation of 1,2-substituted 4,6-dioxotetrahydropyrimidines  
AU Dashkevich, L. B.  
IT 7348-62-1 94205-66-0 94209-30-0  
94209-31-1 94541-58-9 94541-59-0  
94541-60-3 94541-61-4 94541-62-5  
RN 7348-62-1 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



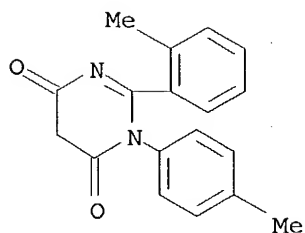
RN 94205-66-0 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1,2-diphenyl- (7CI, 9CI) (CA INDEX NAME)



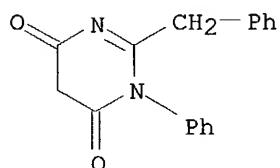
RN 94209-30-0 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1-o-tolyl-2-p-tolyl- (7CI) (CA INDEX NAME)



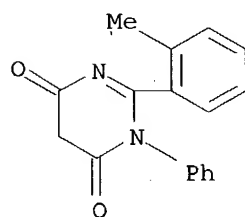
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CN 4,6(1H,5H)-Pyrimidinedione, 2-o-tolyl-1-p-tolyl- (7CI) (CA INDEX NAME)



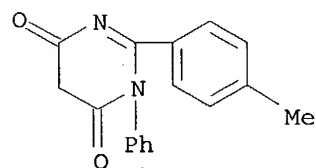
RN 94541-58-9 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 2-benzyl-1-phenyl- (7CI) (CA INDEX NAME)



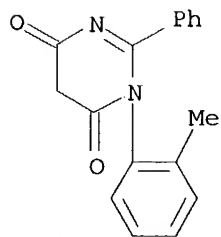
RN 94541-59-0 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-o-tolyl- (7CI) (CA INDEX NAME)



RN 94541-60-3 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 1-phenyl-2-p-tolyl- (7CI) (CA INDEX NAME)

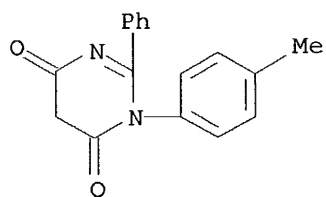


RN 94541-61-4 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-o-tolyl- (7CI) (CA INDEX NAME)

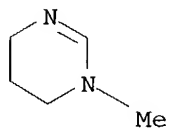


RN 94541-62-5 CAOLD

CN 4,6(1H,5H)-Pyrimidinedione, 2-phenyl-1-p-tolyl- (7CI) (CA INDEX NAME)



L19 ANSWER 24 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA56:12886e CAOLD  
TI hydropyrimidines - (I) 1,4,5,6-tetrahydro-pyrimidine and its derivs.  
AU Brown, Desmond J.; Evans, R. F.  
IT **2304-03-2**  
RN 2304-03-2 CAOLD  
CN Pyrimidine, 1,4,5,6-tetrahydro-1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



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L19 ANSWER 25 OF 32 CAOLD COPYRIGHT 2004 ACS on STN

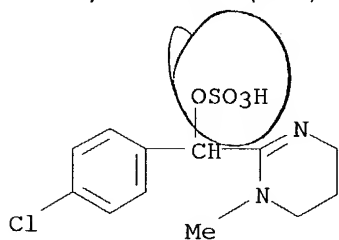
AN CA56:8714d CAOLD

TI antihypertensive agents-derivs. of 2-imidazoline and 1,4,5,6-tetrahydropyrimidine

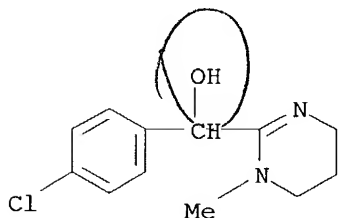
AU Faust, John A.; Yee, L. S.; Sahyun, M.

IT 92905-24-3 92905-25-4 95769-51-0

RN 92905-24-3 CAOLD

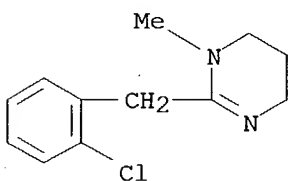
CN 2-Pyrimidinemethanol,  $\alpha$ -(p-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl-, sulfate (7CI) (CA INDEX NAME)

RN 92905-25-4 CAOLD

CN 2-Pyrimidinemethanol,  $\alpha$ -(p-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl-, (7CI) (CA INDEX NAME)

RN 95769-51-0 CAOLD

CN Pyrimidine, 2-(o-chlorobenzyl)-1,4,5,6-tetrahydro-1-methyl-, monohydrochloride (6CI, 7CI) (CA INDEX NAME)



● HCl

L19 ANSWER 26 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA55:16577h CAOLD  
TI 2-diarylalkyl-3,4,5,6-tetrahydropyrimidines  
AU Dornfeld, Clinton A.  
PA Searle, G. D., & Co.  
DT Patent

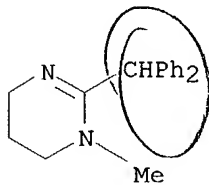
PATENT NO.	KIND	DATE
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PI	US 2946791	1960
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IT **109693-83-6**

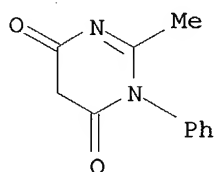
RN 109693-83-6 CAOLD

CN Pyrimidine, 2-diphenylmethyl-1,4,5,6-tetrahydro-1-methyl- (6CI) (CA INDEX NAME)

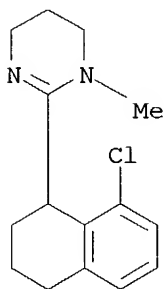




L19 ANSWER 27 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA55:3252f CAOLD  
TI photographic Ag halide emulsions (stabilized)  
PA Eastman Kodak Co.  
DT Patent  
TI stabilization of photographic Ag halide emulsions against hardening  
AU Damschroder, Rudolph E.; Cowden, H. B.  
DT Patent  
PATENT NO.      KIND      DATE  
-----  
PI US 2944899      1960  
GB 875581  
GB 875582  
IT **7348-62-1**  
RN 7348-62-1 CAOLD  
CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA  
INDEX NAME)



L19 ANSWER 28 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA55:2701f CAOLD  
TI halogenated derivs. of tetrahydro-1-naphthyl cyclic amidines  
AU Sahyun, Melville; Faust, J. A.  
PA Sahyun Laboratories  
DT Patent  
PATENT NO. KIND DATE  
-----  
PI US 2948724 1960  
IT **94064-59-2**  
RN 94064-59-2 CAOLD  
CN Pyrimidine, 2-(8-chloro-1,2,3,4-tetrahydro-1-naphthyl)-1,4,5,6-tetrahydro-1-methyl- (6CI, 7CI) (CA INDEX NAME)



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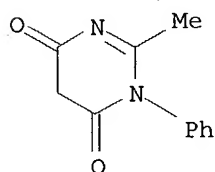
L19 ANSWER 29 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA54:19241c CAOLD  
TI merocyanines and planar undissocd. cyanines  
AU Heseltine, Donald W.; Brooker, L. G. S.  
PA Eastman Kodak Co.  
DT Patent

	PATENT NO.	KIND	DATE
PI	US 2927026		1960
	DE 1082118		
	GB 869521		
	GB 869532		

IT **7348-62-1**

RN 7348-62-1 CAOLD

CN 4,6(1H,5H)-Pyrimidinedione, 2-methyl-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA  
INDEX NAME)



10

L19 ANSWER 30 OF 32 CAOLD COPYRIGHT 2004 ACS on STN

AN CA54:6769d CAOLD

TI 6-(substituted-amino)purines

AU Okumura, Shigeo

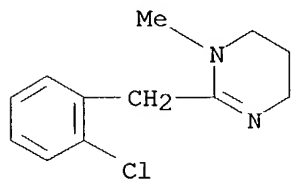
DT Patent

PATENT NO.	KIND	DATE
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PI	JP 59598526	1959
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IT **95769-51-0**

RN 95769-51-0 CAOLD

CN Pyrimidine, 2-(o-chlorobenzyl)-1,4,5,6-tetrahydro-1-methyl-,  
monohydrochloride (6CI, 7CI) (CA INDEX NAME)

● HCl

L19 ANSWER 31 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA54:6768d CAOLD  
TI amidines  
AU Faust, John A.; Sahyun, M.  
PA Sahyun Laboratories  
DT Patent

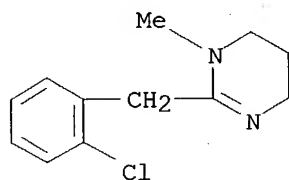
	PATENT NO.	KIND	DATE
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PI	US 2919274		1959
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IT	95769-51-0	100388-35-0	100388-36-1
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RN	95769-51-0	CAOLD	
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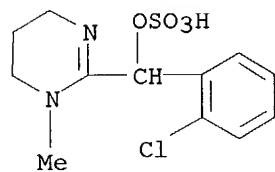
CN	Pyrimidine, 2-(o-chlorobenzyl)-1,4,5,6-tetrahydro-1-methyl-, monohydrochloride (6CI, 7CI)	(CA INDEX NAME)	
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● HCl

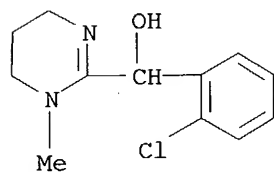
RN	100388-35-0	CAOLD	
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CN	2-Pyrimidinemethanol, $\alpha$ -(o-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl-, sulfate (6CI)	(CA INDEX NAME)	
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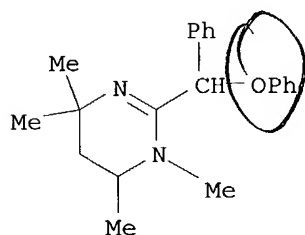
RN	100388-36-1	CAOLD	
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CN	2-Pyrimidinemethanol, $\alpha$ -(o-chlorophenyl)-1,4,5,6-tetrahydro-1-methyl-, (6CI)	(CA INDEX NAME)	
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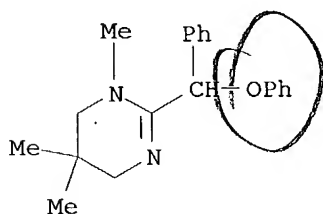
L19 ANSWER 32 OF 32 CAOLD COPYRIGHT 2004 ACS on STN  
AN CA53:20102f CAOLD  
TI 2-aryloxyaralkyl-1,4,5,6-tetrahydropyrimidines  
AU Dornfeld, Clinton A.  
PA Searle, G. D., & Co.  
DT Patent

	PATENT NO.	KIND	DATE
PI	US 2893993		1959
IT	<b>112325-53-8 114721-96-9</b>		
RN	112325-53-8 CAOLD		
CN	Pyrimidine, 1,4,5,6-tetrahydro-1,4,4,6-tetramethyl-2- $\alpha$ -phenoxybenzyl-, hydrobromide (6CI) (CA INDEX NAME)		



● HBr

RN 114721-96-9 CAOLD  
CN Pyrimidine, 1,4,5,6-tetrahydro-1,5,5-trimethyl-2- $\alpha$ -phenoxybenzyl-, hydrobromide (6CI) (CA INDEX NAME)



● HBr

10/009,477 (RCE)

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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1050.00

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-111.30

STN INTERNATIONAL LOGOFF AT 15:49:38 ON 24 NOV 2004